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Chair

Mr. Neil Ellis

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● (1535)

[*English*]

The Chair (Mr. Neil Ellis (Bay of Quinte, Lib.)): I call the meeting to order.

Pursuant to Standing Order 108(2), we are studying of the effects of mefloquine use among Canadian veterans. Before us we have Dr. Ashley Croft, consultant public health physician. We'll start with you, Dr. Croft. You have the floor.

Dr. Ashley Croft (Consultant Public Health Physician, As an Individual): Thank you very much, Mr. Chairman.

Good afternoon, ladies and gentlemen. I'm delighted to be here.

My name is Ashley Croft, and I'm a retired doctor from the British army. I trained in medicine in London, England, and joined the army in 1986, initially as a regimental medical officer attached to the Royal Horse Artillery as their doctor. I was in Germany and worked alongside the Royal Canadian Horse Artillery, which was very nice. Then I trained in tropical medicine, and I got involved in this field starting in about 1993, until I left the army in 2013.

I didn't want to get involved with malaria. I wanted to do legionnaires' disease, but early on I was told to start looking at this new drug, and I agreed to do so, because in the army you do what you're told. The new drug was mefloquine, Lariam, and during the next 20 years I did randomized controlled trials and systematic reviews of trials.

I'll come to my conclusion straight away—this is a very dangerous drug.

It's uniquely dangerous to soldiers. It is mind-altering and mood-changing, and also causes severely disrupted sleep, so it should not be given to soldiers as a malaria prophylaxis at all, in my view, especially since safer and more effective, or as effective, drugs are available and indeed have been available throughout this time. That's my position.

It wasn't the position I started with. To start with, I was told that this was a new drug, a good drug, and I was given proof that it was a good drug. However, my findings were the opposite of what I expected.

The Chair: Thank you.

Dr. Libman, you're up next.

Dr. Michael Libman (Professor, Department of Medicine, McGill University Health Centre, As an Individual): Hello.

I should start with a little bit of my background. I'm a specialist in infectious disease medical microbiology. I have been working in the field of tropical medicine and travel medicine since about 1992. I'm based out of McGill where we have a very large clinic for both pre-travel preparation and post-travel assessment of people coming back ill. We do provide a lot of preparation. We don't work directly with the military as a rule, so that's not part of our involvement, but we certainly have major activity in terms of preparing people travelling to areas where malaria is a risk. We do see people coming back with various illnesses and we do see a lot of cases of malaria, unfortunately, almost universally in people who haven't taken any prevention prophylaxis.

I'm speaking as a physician and clinician, but I have to mention that I'm a member of CATMAT, which is the committee to advise on tropical medicine and travel for the Public Health Agency of Canada. I've actually been chair of that committee since the beginning of 2019. As a group we have been responsible for producing the guidelines. Under CATMAT, we produce guidelines on a variety of travel issues including malaria and recommendations for the prevention of malaria. I've been involved from that point of view, as well.

I think that the real issue for me is that malaria, of course, has the potential to be a severe disease with a lot of complications and it can be lethal. Prevention of malaria is extremely important and finding mechanisms to prevent malaria that are acceptable and tolerable to individuals is very important.

Essentially almost all cases of malaria can be prevented through a variety of measures, but in particular by taking medication during the time of exposure. Well over 95% of the cases of malaria that we see are in people who either were not taking any preventive medication, were taking it improperly or were perhaps taking the wrong medication.

Mefloquine has been one of the cornerstones of malaria prevention. It was first introduced in 1985. In Canada it was a little bit later—in the early 1990s. I don't think there's any controversy at all about whether mefloquine prevents malaria. There is generally wide agreement that mefloquine does prevent malaria and in terms of preventing malaria, it is roughly equivalent to any of the other approved and recommended drugs that are out there. The issue is not about efficacy against preventing malaria. The debate, I think, is entirely around safety and whether there's a significant difference in the safety and toxicity profile of mefloquine compared with other agents that are available.

As is typical within medicine, the issue is trying to strike a balance between the benefits of the drug versus its safety and tolerability. Although I admit there is some debate and some controversy, nevertheless there is also a lot of data. It's never perfect, but we do have a lot of data. We do have a lot of numbers that I think are quite reliable. Although we can never be completely definitive about some of these issues that are under debate, we do, I think, have a reasonable amount of confidence in the safety and tolerability issues with the drug.

There are definitely real medical debates around mefloquine that need to be considered, but there are also a lot of controversies that I think are not terribly scientific or are pseudoscientific and bear a certain resemblance to the kind of thing that's going on now with some of the vaccine issues.

I'm not going to talk any more about efficacy of prevention of malaria. I'm going to talk only about safety and tolerability issues.

● (1540)

To some extent, there's a problem with making a distinction between an association of taking the drug with adverse events versus the causality. It's always difficult, especially when you're talking about things that can be long term, to make that association. We see the same thing with vaccines and the idea of whether a measles vaccine causes autism. I think the scientific consensus is clearly that it doesn't. Nevertheless, many cases of autism appear at roughly the same time that people get vaccinated, so there is an appearance of causality that I think is not intuitive, to some people anyway, who are involved in the debate.

There is also some confusion about levels of evidence and that we never have 100% certainty in this business about the causality and that type of thing. There are always levels of confidence and levels of probability, and that's part of the problem.

There's the fact that, like vaccines, when you're giving something in a preventive nature.... We're talking not about giving a drug to treat an illness—mefloquine can also be used to treat malaria—but in this case we're talking about prevention. The trouble is that, just like vaccines, the risks are generally not going to happen to the same people who are going to get the benefit.

The people who benefit from the prevention of malaria are essentially invisible, because when the thing works, the people are well and don't get sick. You don't see in front of you the effects of the prevention; you see essentially that people are well. The adverse effects that can happen from any drug—mefloquine or any drug, or any vaccine—will happen not necessarily to the same people where you're preventing the disease. You don't know who those people are for whom you're going to prevent the disease. You can see adverse events that happen to some, hopefully, small proportion of people, whereas you don't actually see the benefit in front of you because that's a preventive effect.

There are obviously other problems that happen in all of medicine, but here as well. In some cases, there are vested interests and ulterior motives that some people may have, in terms of either promoting the drug or having problems with it. Of course, just like the vaccine world, there's been a lot of sensationalistic stuff over the many years in the media about mefloquine, and very prominent attention given to some particular cases of issues that may or may not have been related to the drug.

The problem with safety is that the most common types of studies that we use to study the efficacy of a drug, which are the so-called randomized controlled trials, are not great studies for safety and toxicity. The double-blind studies that are done are fantastic for trying to have a lot of confidence in the outcomes of the study, which is very critical in trying to decide whether a drug works or doesn't work, but because they're so complicated, the studies are relatively small and relatively limited in time.

When you have effects, adverse events that are rare or that may happen over the long term, they may not be captured in this gold standard of clinical evidence, which is the randomized controlled trial. For safety and tolerability, we're stuck more with so-called cohort studies, where groups of people are followed over time. The fact that they have received one drug or another drug, no drug at all or a placebo is not done in a randomized fashion, so the studies are prone to a certain type of bias. However, you can also open up those studies to much larger numbers of people so that it becomes possible to detect rarer types of adverse events, as is the case with the types of issues of mefloquine that we're talking about.

The studies give you less confidence sometimes about the true causal nature of taking the drug versus the adverse event, but you hopefully overcome that by having large studies and multiple patients all showing similar types of effects.

That's what we have basically for mefloquine. We have the randomized controlled studies, which in fact generally have never shown that mefloquine has a worse safety profile. It has a different safety profile, but not necessarily a worse safety profile than the other alternatives. It became known, because even in the randomized trials, there was a signal that there were some side effects of a neuropsychiatric nature that we were seeing more often with mefloquine than with other drugs.

● (1545)

The randomized controlled trials did not give any indication of a severe problem or a problem that was not reversible, and didn't give evidence that the overall tolerability or the overall severe adverse event rate was much different from that of the other drugs to which it was being compared. The big cohort studies were undertaken to also look at some of these things.

Again, it's a bit difficult sometimes, because we understand that some of these effects may be seen perhaps in different ways in different types of travellers; people who are going on short-term trips and have short-term exposure to the drug might not be the same as people who are on long-term trips and have long-term exposure. People who are in certain types of conditions, who are travelling under certain types of conditions, such as the military or other groups where there is a lot of stress related to the travel to begin with, and whether or not the drug might have some kind of additive effect on top of some of the risks associated with the underlying reason for the travel.... Those are difficult to untangle in some of these studies.

Nevertheless, as a group, I think the study.... There's a lot of data. When looking particularly at long-term adverse events, the long-term adverse events that are relatively rare don't seem to happen more often with mefloquine than with other agents, although the nature of things might be different. As I say, some of the neuropsychiatric types of things seem to be perhaps more common.

In terms of how many people discontinue the drug versus other drugs, compared to atovaquone-proguanil, which is one of the main common choices these days, a few more people tend to discontinue it than atovaquone-proguanil. With the main other drug that's used, doxycycline, about the same number of people discontinue.

The types of neuropsychiatric effects that are described in these studies are mostly things like insomnia, strange dreams and feelings of anxiety or a depressed mood. These are generally self-reported and not documented in a formal, objective kind of way, but in terms of long-term effects we have studies of hundreds of thousands of participants. When in these long-term studies and these big cohort studies you're comparing the drugs against each other, there has really not been a difference that's detected. What we have as evidence that there are long-term complications and sequelae of taking the drug are really case reports—some small case series—but we don't have evidence of comparing one drug against the other that —

● (1550)

The Chair: Dr. Libman, I'm sorry. You're down to about 30 seconds. I'll just get you to wrap up and then we'll have some questions.

Dr. Michael Libman: Basically I would say that in terms of the status of the evidence of long-term psychiatric effects of mefloquine, we have case reports. We can't.... Despite studies of hundreds of thousands of subjects, we can't demonstrate that this is confirmed, and if there are these types of effects, we presume that they are actually very rare.

Ultimately, the choice of mefloquine versus other drugs is going to be an individual type of choice. Individuals will have different risk factors where you might want to choose one drug over the other for a whole variety of reasons. Whatever the problems are with mefloquine, they're not of a nature that you would want to take that option off the table entirely, in my opinion.

The Chair: Thank you.

Ms. Wagantall, you have six minutes.

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

Thanks very much to both of you for being here today.

Dr. Libman, you've just become the chair—in 2019—of CATMAT. Is that correct?

Dr. Michael Libman: That's correct.

Mrs. Cathay Wagantall: Thank you.

Our surgeon general put out a report in June of 2017 in regard to mefloquine. When I look at the report, I see that a lot of the information came through CATMAT. Were you involved in the research that was done for that report for the surgeon general?

Dr. Michael Libman: I'm not a malaria researcher. I haven't been involved in that particular research or, in fact, in research on mefloquine directly.

Mrs. Cathay Wagantall: Not directly...okay. Thank you.

Dr. Ashley Croft, you mentioned this in a statement:

> There is no organisation more entrenched than a government department whose senior members are anonymous and unaccountable to the general public. Safer alternatives to mefloquine (doxycycline and...[Malarone], for example) have been available for decades.

Would you like to make any comments on that, please?

Dr. Ashley Croft: Yes. Doxycycline has been available since 1991 at least, because that's when Pfizer licensed it. Potentially, it was an anti-malaria drug that could have been used in the nineties. In 1997, there was an important randomized controlled trial, which Professor Libman has referred to as being the “gold standard” of evidence, conducted in soldiers in Indonesia by an U.S. Army research team. This found that it was extremely effective at preventing malaria. The efficacy was 99%.

The tolerability of it was excellent as well.

Mrs. Cathay Wagantall: You do say there are safer alternatives to mefloquine. Why do you say that?

Dr. Ashley Croft: That's a safer alternative because it doesn't have the profile of neuropsychiatric events that have been seen with mefloquine from the very beginning. Right from the 1980s it was known that neuropsychiatric events were associated with this drug. In 1989, the World Health Organization put out a technical document that said that people operating heavy machinery should not use this drug. In 1991, they reiterated their concern about the neuropsychiatric events, saying there really needed to be more research about these events—what causes them, how they can be mitigated and how they can be prevented completely.

From the outset, mefloquine has been known to be unsafe in terms of its neuropsychiatric profile. That's why I said it's uniquely dangerous in soldiers because soldiers have to be at peak performance psychologically to do their jobs.

● (1555)

Mrs. Cathay Wagantall: Dr. Libman, you mentioned it briefly, but I'd just like to ask this directly: How extensive is your background related to the study of mefloquine specifically?

Dr. Michael Libman: I'm familiar with, I think, nearly all the research that's been done. I haven't participated in the research projects.

Mrs. Cathay Wagantall: Are you familiar with the research of Dr. Ritchie, Dr. Nevin, Professor Jane Quinn from Australia and Dr. Edward Sellers? They've all been testifying at this committee.

Dr. Michael Libman: Yes, I'm generally familiar with it. I can't say I've reviewed it specifically for now, but I've generally read most of it.

Mrs. Cathay Wagantall: Okay.

Dr. Croft, how many veterans have you directly engaged with in regard to mefloquine and its impact on our soldiers? I guess in your case it would be Britain. Would it be in Canada as well?

Dr. Ashley Croft: When I was an army doctor working full time for the British army, I was involved in the policy side of infectious disease prevention, which included malaria. Since leaving the army I haven't been involved in veterans' organizations at all. I'm not involved in any lobbying groups. That was deliberate; I didn't want to give the impression that I was taking on a particular side. I've remained independent. I hope that answers the question.

Mrs. Cathay Wagantall: Okay, thank you.

Are you aware of what's been happening in the United States and Australia in regard to mefloquine and the approach they are now taking towards...? It's not individuals who are using the drug now. Even in Canada our surgeon general has now indicated it's the drug of last resort. I have a list of those who have taken the drug since 2003. The numbers have diminished to almost nil.

However, there are those who were impacted by this drug when it was supposed to be a study. The surgeon general commented that they did not identify any evidence that met their inclusion criteria addressing potential long-term adverse effects of mefloquine, yet our Health Canada monogram significantly changed, indicating that there can be long-term effects of this drug.

Dr. Ashley Croft: Do you mean in 1992-93? Yes, it was Somalia. That was before it was licensed.

Mrs. Cathay Wagantall: Right.

Dr. Ashley Croft: I had some correspondence with MP John Cummins right about that time about this, and I understand the drug hadn't been licensed in Canada then, but it had been released under an investigational program by which it could be tried—

Mrs. Cathay Wagantall: In Somalia, it was supposed to be a test case.

Dr. Ashley Croft: In specific conditions it could be given to individual patients who could then be watched very carefully. I understand that somehow 900 soldiers came under this category and went off to Somalia and took it with disastrous consequences, of course, as we know.

Mrs. Cathay Wagantall: They were required to take it, first of all. It wasn't licensed at the time, and there was actually no study done because it didn't fit the criteria. They indicated that, basically, the theatre did not work for that, yet they went ahead and administered the drug anyway. I'm not a researcher, but if you're given the job to look at a drug and you don't do that and then still administer it, where does that fit ethically?

Dr. Ashley Croft: I understand that's been looked at already. I believe the Auditor General of Canada did his own investigation of that and was very critical of that in 1999. All I can do is reiterate what the Auditor General of Canada said, without knowing the exact details.

Mrs. Cathay Wagantall: Okay. Fair enough.

Dr. Ashley Croft: To just give a mass of people a drug and then tell them to go off and really have no provision for monitoring them carefully—as this was the whole rationale for giving the drug in advance of its licensing—seems to be a weird way of carrying out a study.

Mrs. Cathay Wagantall: Right.

The Chair: Thank you.

Mr. Eyolfson.

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

Thank you both for coming.

Dr. Croft, I want you to expand on your statement that this drug is "uniquely dangerous" for soldiers. What is the level of evidence that leads you to that conclusion?

Dr. Ashley Croft: The side effect profile of the drug is one that focuses on the neuropsychiatric side, whereas with, say, doxycycline, it's a side effect profile that is more weighted toward the gastrointestinal and dermatological side. I think soldiers can put up with a bit of—

Mr. Doug Eyolfson: No, I understand that. I'm wondering what kinds of studies you're looking at. Are you looking at the numbers of soldiers who were exposed to this, those who developed symptoms, those who didn't...?

I'm a physician, and I also did some medical research before medical school. We have levels of evidence that we get from the laboratory. We have levels of evidence when we look at the biochemistry of it. To make a trend to say "this drug does this", of course we need large trials. What studies can you cite to give you this certainty that a soldier is much more likely to develop neuropsychiatric problems with this drug versus others?

● (1600)

Dr. Ashley Croft: Right. Perhaps I could go back to 1995 and a pivotal study. It was a control study involving *n* equals two, or two individuals. This was the Wittes and Saginur paper, which I remember reading then and was very struck by.

I'll have to expand on this a bit. This was a study where two geologists went to Tanzania. I'm sure you remember this. One of them was from Ottawa, in fact. They shared a tent for eight weeks. I think both geologists were in their forties. They were young and healthy guys. One of the geologists—

Mr. Doug Eyolfson: I'm sorry to cut you off, but maybe you could provide the reference for that later. I have very limited time and I have other questions.

Dr. Ashley Croft: I did send an advance copy.

Mr. Doug Eyolfson: Thank you. We'll look at that.

Dr. Ashley Croft: It's very important.

Mr. Doug Eyolfson: Yes.

I have a 2018 article here from the American Journal of Tropical Medicine and Hygiene. This looked at the use of anti-malarial medications in U.S. veterans of the wars in Iraq and Afghanistan. This was a study of almost 19,500 veterans. They looked at all the different symptoms that they developed and the different drugs they were on. Again, we're talking almost 20,000 veterans here.

Basically, this was the conclusion of this very large study:

> These data suggest that the poor physical and [mental health] outcomes reported in this study population are largely because of combat deployment exposure.

It said that in this very large study, when you corrected for combat deployment exposure, there was no association or no difference that they could see in these numbers of neuropsychiatric effects among those who received mefloquine versus those who didn't.

Do you have any large studies that refute that?

Dr. Ashley Croft: Right. I'll come back to a randomized controlled trial, but before giving the details of that, I need to point out to the chairman that what you're describing is an observational study. Observational studies are by definition weak sources of evidence. The fact that it's large doesn't make it powerful. It just means it's likely to be more weak. I don't think we can put too much credence in that. We must focus on the—

Mr. Doug Eyolfson: What are the other studies? If the other ones aren't observational...because, as we've said, if you have something that's going to cause neuropsychiatric effects, ethically right now we couldn't do a randomized controlled trial.

Dr. Ashley Croft: Correct.

Mr. Doug Eyolfson: What kinds of studies are these that you're citing that aren't observational?

Dr. Ashley Croft: In 1995, I carried out two randomized controlled trials with British troops in Kenya, because my superiors told me to. The first one was a bit unsatisfactory. The soldiers were not taking their tablets and they admitted to not complying. I put on a second trial, and this time we said to them, “Look, please take your tablets. It's very important.” We put it in the orders and made every effort to make sure they complied.

The results were surprising. There were 600 soldiers in the study. They were randomized to take either mefloquine or chloroquine and proguanil, which is an obsolete combination now. About 280 were taking mefloquine and about 280 were taking the other regimen. It was double-blinded. We had two critical events among the soldiers. One of the soldiers became psychotic. He was getting auditory delusions and had to be airlifted out back to England to a mental hospital. His career was wrecked as a soldier. Shortly after the trial ended, we had a soldier who committed suicide. When the code was broken, it was found that he also was on mefloquine. Those were two very, very severe events.

Mr. Doug Eyolfson: This was 600 soldiers. They were randomized.

Dr. Ashley Croft: Yes.

Mr. Doug Eyolfson: It was two soldiers out of 300 having developed psychotic symptoms.

Dr. Ashley Croft: Yes, and there were none in the chloroquine and proguanil arms, so that, to me, represents—

Mr. Doug Eyolfson: I'm sorry to cut you off.

If you look at the incidence of psychotic disorders in the population, two out of 300 goes, if anything, a little lower than what you'd have in the general population.

Can you really extrapolate any sort of statistical significance from two instances of psychotic symptoms among 300 people?

Dr. Ashley Croft: If you're studying soldiers for six weeks, you don't get two soldiers out of 600 becoming psychotic—one of them committing suicide and one of them being confined to a mental home. By definition, soldiers are psychologically healthy, so there was something happening that was causing these terrible events in these soldiers.

I should add that the trial, towards the end, actually collapsed. I have to say, my superiors could see that it wasn't going the way they wanted, and I was taken off the control of that particular trial and sent to Bosnia. I never even found out about the guy who'd committed suicide until several years later when, by chance, I discovered that had occurred.

There was a coroner's inquest into that case, and the coroner asked, “Is it the case that this soldier was taking mefloquine?” I was in Bosnia at the time—I didn't even know that there was an inquest—and the coroner was told, “We don't know. He might have been taking mefloquine. We just can't find out. It's unfortunate that he died, committed suicide, but anyway, mefloquine doesn't cause anything particularly.... It doesn't affect soldiers any more than it does civilians”, which is a kind of fudgy answer. Therefore, the conclusion—

● (1605)

Mr. Doug Eyolfson: Okay. I'm sorry to cut you off.

How much time do I have, Mr. Chair?

The Chair: You're out of time.

Dr. Ashley Croft: The conclusion was natural causes.

The Chair: Go ahead, Ms. Blaney.

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

Dr. Croft, as I listened to your testimony and some of the questions you were just answering, I couldn't help but think of the precautionary principle.

Dr. Ashley Croft: Yes. Good.

Ms. Rachel Blaney: When I think of 280 people taking medication and two of them having that kind of episode, I have to be honest. I'm not willing to risk any of the men and women in uniform in this country—

Dr. Ashley Croft: Good.

Ms. Rachel Blaney: —in that way.

One of the things you said in your testimony is that in the army, you do what you're told.

I would like you to just share a little about that and the impacts that could have on the people who have served our country. The Conservative member that you talked to earlier, Cathay Wagantall, talked about the actual stats that have come out. I don't have the numbers in front of me, but it's a tremendous number of people who have taken mefloquine.

One of the things that's a huge concern for me is that we don't actually have a program to contact any of those veterans to say to them, “Let's check to see if this might be....” That's the challenge. We've had other doctors say that sometimes these folks are being treated for post-traumatic stress disorder, which may or may not be part of their issue, but if they're not being treated appropriately for what's happened to them as a result of mefloquine, they're not getting the full treatment, which can be very hard on them and their loved ones.

I'm just wondering if you could speak to this. How can we do outreach? What is the reality when we have a system where you do what you're told? What do we need to ask the Canadian government to be responsible for?

Dr. Ashley Croft: Soldiers are a different population from the CATMAT population, who are travellers who are in a position where they can make informed choices as to whether to take drug A, drug B or drug C. Soldiers are generally told, “You're going to this location. Take this drug and have these vaccinations.” They're not given informed choices in the matter. In a sense, they shouldn't be because that can lead to an undermining of discipline.

On the other side of the equation, the standard of safety and tolerability must be of the highest level for soldiers. Therefore, giving a drug that's inherently going to be dangerous strikes me as being an affront to the vulnerability of soldiers. It's something that should never have happened.

By the same token, now that it has happened, every effort should be made to contact them by whatever means to see what can be done to mitigate their damaged circumstances. I can't really speak to the Canadian government and tell it what to do, but it seems to me that it's a matter of basic ethics to try to retrieve the damage now that it's occurred.

Ms. Rachel Blaney: Thank you for that.

You talked about the profile—and I hope I'm getting this right because I'm definitely not a physician—of the neuropsychiatric impact. I'm just wondering if you could explain what that means, compare it to the other medications that you can take for malaria and explain how their profiles are different.

Dr. Ashley Croft: I know this committee wants to look at the most recent research. My research is a bit historical now. The most recent research, which I think Dr. Libman will agree with, is the Cochrane review. I did the first Cochrane review of mefloquine, published in the British Medical Journal in 1997. It has now been updated four times. The most recent review, which looks at all the randomized controlled trials and tries to extract that type of data, came out in 2017.

To answer the question, that review looked at 20 different randomized controlled trials of mefloquine. It found that comparing it with, say, atovaquone-proguanil, three times more people taking mefloquine were likely to stop taking the drug because of side effects.

That really makes it not as effective. I know Dr. Libman is looking very doubtful, but the relative risk is 2.86, which I interpret as meaning you are three times more likely, if you're taking mefloquine, to stop your drug. If you stop your drug, you risk getting malaria.

Within that analysis, they are comparing mefloquine and atovaquone-proguanil. They find that 6% of mefloquine users discontinue the drug, 13% get insomnia, 14% get abnormal dreams, 6% get anxiety and 6% get depressed mood. That gives you a flavour of the types of figures one can expect, bearing in mind that these studies, these randomized controlled trials, tend to be done in perfectly healthy, unstressed populations. For soldiers, those figures are likely to be comparable or perhaps worse.

When you look at the comparison with doxycycline, the figures are even worse. Of mefloquine users, 31% get abnormal dreams, whereas only 3% of doxycycline users get abnormal dreams.

● (1610)

Ms. Rachel Blaney: Wow, that's a big difference.

Dr. Ashley Croft: Of mefloquine users, 18% have anxiety and11% have depressed mood. There are much lower figures with doxycycline.

Right through that very rigorous analysis you're seeing neuropsychiatric events predominant in mefloquine users, so who would ever want to take mefloquine? Who would want to give it to soldiers, given that soldiers must be mentally, as well as physically, healthy?

Ms. Rachel Blaney: What we've heard from other witnesses is that this is the concern. Some of the results of taking the medication are the same as what you would experience potentially just from going overseas.

How is the soldier to be able to tell and disclose?

Dr. Ashley Croft: Exactly.

Of course, what one has to bear in mind is that if you're a soldier, you don't go to your sergeant major and say you're feeling a bit anxious or a bit depressed or you're having nightmares. You would be told to just carry on with it.

You wouldn't associate it with the medication you're taking, so you'd just carry on taking it. All the evidence is that if you carry on taking mefloquine, the adverse effects become more intense and the risk is that they become prolonged and perhaps permanent, as has happened in some cases.

Those types of risks don't apply to tourists and general travellers, who usually take it for only a couple of weeks. Here, we're talking about soldiers who may have to take this drug for typically six months, and in my view, that represents an unacceptable risk.

Ms. Rachel Blaney: Thank you.

The Chair: Mr. Bratina.

Mr. Bob Bratina (Hamilton East—Stoney Creek, Lib.): Thank you. I'll share my time with Mr. Eyolfson.

Mr. Libman, there was a study done in Australia fairly recently. It stated in the conclusions:

> It is clear to the committee that in the view of the medical professionals, the weight of medical evidence does not support the claim that their current symptoms are caused by antimalarial use 18 years ago. More specifically, in summary, the committee was told that long term problems as a result of taking mefloquine are rare....
>
> The committee heard there have been an estimated 40 million doses of mefloquine worldwide, with safety data on at least 1 million people.... The committee was provided with no evidence that the same symptoms reported by some veterans are manifesting in the Australian population or across the world in the civilian population. The committee heard that there is no evidence of an emerging global public health issue.

I don't know if you are familiar with that study, but how does that ring to you in terms of your observations?

Dr. Michael Libman: What Dr. Croft mentioned in terms of the potential for neuropsychiatric effects, the Cochrane review that he mentioned, there's no argument with any of that.

The issue that I think you're bringing up is the question about long-term effects versus short-term effects. The end of my studies, and so on, all manifested the types of short-term effects he talked about. They can't demonstrate long-term effects, because the studies were simply not that long. It's the observational studies that were much longer and it's those studies that could not demonstrate that there was a long-term problem.

Everybody agrees that those effects happen in the short term. In the vast majority of cases, you stop the drug and the side effects go away. I don't generally treat soldiers, but I can certainly understand that if you have those neuropsychiatric effects, you would normally want to stop the drug and choose something else if need be.

However, in the question you're bringing up, I think what you're quoting from is the testimony to the Australian veterans committee.

● (1615)

Mr. Bob Bratina: Yes.

Dr. Michael Libman: That's a committee similar to this one, I believe.

What they're trying to bring out is the issue of long-term effects. Do we have any evidence from soldiers or others that the type of neuropsychiatric effects or other types continue after the drug is stopped? That's the critical point there.

The evidence that it continues for a long time after the drug is stopped.... What we have is what seem to be some very rare cases. All the attempts to show it in the studies have failed to show it. There are reports that it may have happened, but they're individual reports, so it's hard to see whether it's more common in the people who took mefloquine than it is in people who took any other drug.

We have a hypothesis that it might be a very rare event. The question then is whether, in that setting, it outweighs the benefits of the drug. The benefits are clear—preventing malaria is paramount.

Mr. Bob Bratina: Let me interrupt there. I want Mr. Eyolfson to finish off.

Go ahead, Doug.

Mr. Doug Eyolfson: Thank you, Mr. Bratina.

Dr. Libman, are you familiar with the study I mentioned before, the one of U.S. veterans in Iraq and Afghanistan who were followed from 2001 to 2008?

Dr. Michael Libman: Yes.

Mr. Doug Eyolfson: What is your take on that? Would you say this is a reliable form of study? Can you make conclusions regarding the long-term neuropsychiatric effects based on the sample size and the length of time that people were followed?

Dr. Michael Libman: It's true that these observational cohort studies don't provide the same level of confidence. Nevertheless, we have this study, and it follows the same direction as a number of other studies—some in military groups, some in non-military groups, short-term travellers and long-term travellers. We have accumulating evidence that generally points in the same direction, which is that it's been very difficult to show that the long-term events after mefloquine happen at a rate any different from what you see with any other drug.

The evidence is that either it doesn't happen, or if it does happen, it has to be very rare. The accumulated evidence of this study, together with all the other ones, such as what is presented in the Cochrane review, is that it has to be very rare. Then there's the question of whether the rarity of adverse events negates their value, when the drug is used in certain ways. There are always ways, when there are adverse events, to switch to other drugs. What I would say, however, based on the evidence, is that either there are no long-term effects or those effects are very rare. It's very hard to tell the two apart.

Mr. Doug Eyolfson: Thank you.

Are you familiar with the work of Dr. Remington Nevin?

Dr. Michael Libman: I am.

Mr. Doug Eyolfson: How would you evaluate the scientific veracity of his claims that there's a brain stem injury and there's significant neuropsychiatric effects in these? What is the quality of his evidence, in your view?

Dr. Michael Libman: Without going into all the details, I would say that the medical community does not generally believe there is reliability in the types of reports he's giving. These reports are not regarded as having nearly the quality of evidence and reliability as does the accumulation of studies such as the ones you mentioned and the others that have been reviewed.

Mr. Doug Eyolfson: Thank you.

The Chair: Ms. Ludwig.

Ms. Karen Ludwig (New Brunswick Southwest, Lib.): Thank you.

Thank you both for your testimonies today.

Dr. Libman, are you familiar with research conducted on soldiers from countries other than Canada who were prescribed mefloquine and participated in the conflict in Somalia?

Dr. Michael Libman: Sorry, I missed a little bit of that question.

Ms. Karen Ludwig: Have you seen any research from other countries whose soldiers participated in the conflict in Somalia in 1992 and 1993 and were prescribed mefloquine?

● (1620)

Dr. Michael Libman: Off the top of my head, I can't comment on studies done specifically on the Somali veterans. I'm aware of studies done on military populations, particularly the American military, but I can't tell you off the top of my head where those soldiers served or the exact dates they may have been exposed to mefloquine. Specifically on that, I can't answer. There are definitely, as we just talked about, several studies on military populations deployed in combat zones.

Ms. Karen Ludwig: Right. I'll be very open. Here's one point I want to get some collaboration or elaboration on. I have read that, before the conflict in Somalia, with our Canadian Armed Forces who participated in that, we were really seen as a peacekeeping nation with the United Nations. A number of reports said we weren't as prepared as we maybe should have been in that conflict, in terms of what our soldiers were facing on the ground.

Would that have had any impact on some of the long-lasting impacts that some of these soldiers have exhibited?

Dr. Michael Libman: It's a little out of my domain in terms of commenting specifically on that. Clearly, one difficulty, though, is that anybody—soldiers or anybody else—who's in a difficult, stressful type of situation is prone to the psychiatric consequences of that. That's part of what makes this situation so difficult, which is that anybody who's put in a stressful situation can have long-term effects from that. Trying to tease out whether some of those effects might be due to medication as opposed to the rest of the situation is always going to be somewhat difficult.

That's why these studies have been done in general, and also in military populations, trying to see whether there's a difference in taking one drug or another drug. Does that make a difference? That's the only way you can decide whether it's the drug.

As best we can tell, with quite big studies, there doesn't seem to be a difference between one drug and another in that particular question, which is the long-term psychiatric effects.

Ms. Karen Ludwig: Okay. Thank you.

Dr. Michael Libman: In the short term, there is a difference.

Ms. Karen Ludwig: Dr. Croft, I'm wondering if you can tell me the drug company that did the research and development work on mefloquine and that also holds the patent.

Dr. Ashley Croft: Yes. The drug was discovered by the U.S. Army at the Walter Reed Army Institute of Research in Maryland, outside Washington. Because the U.S. Army isn't allowed to engage in commercial dealings, it had to hand it over to a drug company, so it gave mefloquine to Hoffman-LaRoche, a Swiss international company. It was Hoffman-LaRoche that then took on the practice of marketing it.

Of course, the difficulty was that the drug had been developed to treat malaria. In Vietnam, soldiers were acquiring malaria at the rate of 1% of the combat unit per day, so every day a regimental commanding officer would have six of his men go down with malaria, which was not good. The parasite had developed resistance to chloroquine, so there was an urgent need for a malaria treatment drug, and that was mefloquine.

As soon as the drug got into its hands, Hoffman-LaRoche moved the goalposts because there isn't so much of a market for treatment drugs, and it marketed it as a preventive drug. That's the danger. For treatment of malaria you would tolerate a degree of, shall we say, adverse effects from the drug. When you're a healthy traveller, you want a drug that keeps you healthy and well.

Ms. Karen Ludwig: If I can just jump in there, the typical framework, then, for studying a drug before it's ever released to the public, was that conducted by Hoffman-LaRoche?

Dr. Ashley Croft: It wasn't. It took over the Walter Reed framework of experiments. Walter Reed had done two trials on prisoners, believe or not. In the 1970s they got these prisoners and they said, “Right, we have a new drug and we want to try it out on you.”

Ms. Karen Ludwig: That will be a whole other study.

Dr. Ashley Croft: Yes, another inquiry. They infected them with malaria and they gave them mefloquine. It stops malaria. It treats malaria, so it's a good drug for both treating and preventing malaria. Then they gave it to Hoffman-LaRoche.

Hoffman-LaRoche was in a hurry to get it out. It really bypassed the pivotal phase, what are called phase three studies, which it should have carried out on tourists because that's the anticipated population. There were no pivotal randomized controlled trials of the drug on tourists until 2001, when another company did a trial.

Ms. Karen Ludwig: Then may I ask you, knowing what's been suggested now, if Hoffman-LaRoche has gone back and done any further study or analysis, looking at making some changes to its original research and development?

● (1625)

Dr. Ashley Croft: With drug companies, once they have a drug licensed, they see no merit in doing that. They just want to sell as much of the drug as they can. You can see why they'd want to do that.

They haven't done the sorts of studies that one would have wished into the adverse effects, the long-term studies. They could have done a case-controlled study, for example, of rare adverse effects. That hasn't been done by Hoffman-LaRoche, so the answer is no.

The Chair: Thank you.

Mr. Kitchen.

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

Doctors, thank you both for being here today. We appreciate that.

Dr. Croft, you mentioned the civilian population and travelling, and Dr. Libman, you're involved with travelling with CATMAT, etc. Part of what we've heard from veterans, not only in this study but in previous studies we've done, is about the serious side effects and issues they've had to deal with. As well, we also heard from civilians who have been travelling around the world and in Asia. They've been given mefloquine and then been told by Australians to get off that medication and take things like doxycycline.

With that said, Health Canada has come out with a checklist on contraindications for mefloquine, and basically in a change to their monograph, they've added that “the risk of permanent dizziness, vertigo, tinnitus and loss of balance has been clarified”. They've identified that for the health care practitioners and professionals, to make sure they're aware of that fact.

In fact, they even go down to the “Key messages to convey to patients” section, to say this:

> Serious mental and nervous system side effects may occur at any time while taking mefloquine, and in a small number of people, may last for months or years after stopping mefloquine. In some people, dizziness, vertigo, tinnitus, and loss of balance may become permanent.

The Canadian military, in the last six months, has come out and said that they will no longer use mefloquine—

Dr. Ashley Croft: Right, good.

Mr. Robert Kitchen: —because of its side effects, and will only do it if they're being asked for it.

Dr. Libman, I see that CATMAT still recommends atovaquone-proguanil, which is Malarone, doxycycline and mefloquine. We have Health Canada saying it's no good, the military saying it's no good, yet CATMAT is telling Canadians to continue to take it.

I'm wondering if you can comment on that, because the side effects we're seeing—and we're seeing them even more from our veterans—are quite extensive.

Dr. Michael Libman: With regard to CATMAT, I would clarify that the CATMAT recommendations are intended for clinicians, not for the general public. It's not meant as a source of advice for the general public. It's meant to guide clinicians who are themselves advising travellers.

The warnings that came onto mefloquine are there because there have been cases that have been reported, not because it has been definitively shown that those cases were due to mefloquine but that it is a potential risk. That's there for the reason that it's a potential risk to be taken into account when advising anybody. It does seem to be very rare.

In our practice with travellers, as opposed to the military, we do this on a case-to-case basis. We talk to people. There are some advantages, for example, to mefloquine. One of the biggest problems we have, as I mentioned very briefly at the beginning, is that people don't take the medication. They are prescribed something, they don't take it, and then they get malaria and they get sick.

Mr. Robert Kitchen: Correct. They don't take it because of the side effects that they hear about and the issues that it causes. The reality is that it's not a vaccine. It's not given to somebody to build up an immunity. It's purely given as a medication during the time frame that they're in theatre.

There are concerns on that short-term list and they're identified by Health Canada. We need to make certain that we're not doing that same thing to our soldiers and subjecting them to this disorder.

Dr. Michael Libman: I think that the issue is really.... Again, I can't speak specifically to the choice of what to give to soldiers in general, or a specific soldier, but the question is always whether the benefits outweigh the risks for a particular individual.

I can say that when we talk to particular individuals, there are many people who prefer mefloquine. It's easier. It's cheaper. They tolerate it well. They don't have effects. They take the drug, especially because it's a weekly drug versus a daily drug.

I'm sure that's something that has been mentioned at another time. The fact that it's weekly rather than daily encourages some people. It makes taking the drug much easier, and they're much more likely to actually take it. In some cases, that outweighs what we consider to be the very small risk of these kinds of complications. The risk of getting malaria so vastly outweighs the risk of these particular things you mentioned that giving people something they feel comfortable taking, and that they do take, is a very important concern when we're advising individuals.

● (1630)

Mr. Robert Kitchen: Sir, in your research, have you ever examined any veterans who have been on—

Dr. Michael Libman: I do not deal with the military as a rule. We've seen a small number of sick military, but we are not involved in management, generally speaking, of military cases.

Mr. Robert Kitchen: You have never examined them. Is that correct?

Dr. Michael Libman: No, I've occasionally seen sick soldiers who have been hospitalized. That's it.

Mr. Robert Kitchen: Thank you.

Dr. Croft, in March of this year, Australia announced a $2.1-million initiative to support veterans who have taken mefloquine. This includes a comprehensive health assessment for their veterans, including those with concerns about injury related to taking the mefloquine. Do you agree with that initiative?

Dr. Ashley Croft: It sounds a rather modest amount—$2.1 million—given that I'm sure there are hundreds of Australians damaged. Yes, I agree with the principle. The sum seems to me to be insufficient, but yes, I think that kind of initiative is needed. Even though it's not possible to do experimental studies with mefloquine because it's ethically ruled out, it's still possible to do retrospective studies like case control studies to establish more clearly what the exact risks were with the individuals who took mefloquine. That kind of research could perhaps be covered by these government grants.

The Chair: Thank you.

Mr. Chen, you're up. I think you said you're splitting your time with Mr. Eyolfson.

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

Dr. Croft, you mentioned that there are drugs that are safer and as effective as mefloquine.

Dr. Ashley Croft: Yes.

Mr. Shaun Chen: Currently, it's been recorded by the Canadian Armed Forces that within the past two years, only three servicemen and women have been prescribed mefloquine and that the practice currently is that the drug is given only if specifically requested. Can you speak to the alternatives and what you would do in this case? Do you agree with this policy of prescribing it to those who request it?

Dr. Ashley Croft: Yes, there are some people who can take mefloquine without experiencing problems at all. Therefore, if you've taken mefloquine in the past and you're one of the lucky ones who didn't suffer, then you might well want to take it again because it's the devil you know. Those people will be few and as time goes on they'll be fewer and fewer because the number of people who have taken mefloquine is still shrinking exponentially. I can see a case for keeping it as a last resort, but it should just be there as an absolute last resort for those who specifically want it.

Mr. Shaun Chen: Not everyone can make an informed decision if they don't have the information, and too often we rely on drug labelling to provide information on the risks of taking medications.

What do you think is needed in terms of how members of the Canadian Armed Forces can be better informed and educated before they are asked to make that decision?

Dr. Ashley Croft: I think that, to be absolutely safe, it should simply be taken out of the pharmacopoeia and not be there as an option at all, because people might get muddled up as to what the implications of taking this drug are. They might not be aware of its reputation. They might think taking a drug once a week is better than taking it once a day, which I disagree with, by the way. When you're deployed, every day is the same. You don't think, “Today's Monday”. It's just another day. I feel that, on deployment, it's much better to build your daily routine around taking your malaria drug. Personally, my own view—

Mr. Shaun Chen: You're saying to remove it altogether and not provide it as an option.

Dr. Ashley Croft: Yes, take it out altogether.

The Chair: Thank you.

Mr. Eyolfson.

Mr. Doug Eyolfson: Thank you, Mr. Chair, and thank you, Mr. Chen.

Dr. Libman, I'm going back to the Australian Senate report, which we've talked about before. This is from Professor Geoffrey Quail who's the president of the Australasian College of Tropical Medicine. This is based on well-conducted studies of over 360,000 U.S. military, which compared mefloquine with alternative drugs for malaria prophylaxis. It says that “long-term mefloquine toxicity is quite minor.”

Does that sound like a reasonable conclusion from the studies? You apparently read this report too.

● (1635)

Dr. Michael Libman: I agree that it's reasonable. Again, I think there's a little bit of mixing up between short-term effects and long-term effects.

Mr. Doug Eyolfson: Absolutely.

Dr. Michael Libman: I would agree with you completely that those studies of huge numbers of people suggest that long-term effects are either not distinguishable between the drugs or happen rarely with mefloquine.

Mr. Doug Eyolfson: All right. Thank you.

This is going to seem like an overly simplistic question. If I say, I took this drug and then couldn't sleep, does that definitively establish causality between the drug and my inability to sleep?

Dr. Michael Libman: That's obviously one of the problems, particularly if there are other reasons you're not sleeping.

Mr. Doug Eyolfson: Precisely, yes.

If I were to tell you that last year in India my wife and I both took Malarone for malarial prophylaxis and for the period of a week had trouble sleeping and anxiety—which happened, by the way—someone might tell us...but at the same time, her mother had a respiratory infection and was in an intensive care unit in India. Perhaps that would account for our trouble sleeping.

Would you not agree that to say you took this drug and had these symptoms, you need to control for all other variables?

Dr. Michael Libman: I agree, though that being said, there are pretty good control data that in the short term things like difficulty sleeping happen more often.

Mr. Doug Eyolfson: Absolutely, in the short term, yes, I was just using it as an example of causality.

You are confident that the long-term neuropsychiatric effects of this drug, if present, are rare.

Dr. Michael Libman: Exactly.

Mr. Doug Eyolfson: All right. Thank you.

I have no further questions.

The Chair: Mr. McColeman.

Mr. Phil McColeman (Brantford—Brant, CPC): Thank you, Chair.

Dr. Croft, when Mr. Eyolfson wanted to move on to another question and you did not have the time, you were explaining a story you started about two gentlemen in their forties. Could you finish that for us, please?

Dr. Ashley Croft: This was reported in February 1995 in the journal of the Canadian Medical Association. It's a report that would have been read by all Canadian doctors, including military doctors.

It was a case where two buddies were in a tent. One of them was taking mefloquine and the other was taking nothing, because he was a tough guy. They were prospecting for rocks in Tanzania. The guy taking mefloquine took it every Sunday, and everything was going fine. He was getting no side effects.

Then one day, three weeks into the trip, they shared a bottle of whisky on a Saturday night. The effect of that was to make the one who was taking the mefloquine psychotic, while the other one experienced nothing. He started getting auditory and visual hallucinations and was convinced his buddy was going to murder him, so he was going to murder him in exchange, but he controlled himself.

The next day he got very depressed for a day, and then he recovered. He felt a bit strange but by Tuesday he was all right, so everything was fine during the week.

The following weekend—this is all in the paper, by the way; these were Canadian geologists—exactly the same thing happened. They shared a bottle of whisky. The one taking mefloquine became psychotic and had hallucinations, was convinced his buddy was trying to murder him, and wanted to murder him in exchange. The next day, he took his mefloquine tablet and went into deep depression for a day, and by Tuesday was all right.

He decided it had to be the interaction between the mefloquine and alcohol. He decided to stop drinking whisky at the weekend and the rest of the trip he was fine. He came back to Canada and was seen at the Ottawa Civic Hospital. They said this looks like a serious interaction with intense alcohol exposure. They published the report, and of course, that didn't go down at all well with the drug company, because they didn't want a drug that was meant for tourists to have a precaution against alcohol with it.

They set up their own—what I call bogus—alcohol study, which they published the following year, which they carried out to discredit this very important, and in my view, very persuasive Canadian report. In the Dutch study, they got a population of 40 very healthy young people who were more or less teetotallers. They gave them a thimbleful of alcohol— 50 grams—in orange juice, over two hours. Some of them were taking mefloquine and some weren't, but they hadn't taken any mefloquine for a day. Then they put them out on the road and made them drive around and do some other tests and they published it as showing there was no effect of alcohol and mefloquine at all, at least not at low doses.

By that strategy, Roche were able to discredit this very important, in my view, hazard to taking mefloquine. It is one that the troops will inevitably face because that's the way soldiers drink. They don't drink moderately. They drink heavily once a week and if it happens to coincide with the day they take mefloquine, it seems to be a great risk, based on this Canadian study.

During my 20 years in the army I saw it again and again. It was very often the influence of taking alcohol at the same time as mefloquine that made soldiers act irrationally and completely out of character.

After some time, I persuaded to have a policy change in the British Army, which was introduced in December 2005. A policy letter came out: Soldiers taking mefloquine were not to take alcohol; female soldiers were not to take the oral contraceptive pill—it seems to have the same kind of effect— and they were not to take other prescription drugs.

That seemed to mitigate the risk. After that date we observed many fewer episodes of mefloquine-related events, if I may call them that.

● (1640)

Mr. Phil McColeman: Thank you.

You may or may not be aware, but there's a group of veterans who are currently in a lawsuit. They suffer from mefloquine toxicity and are suing the Government of Canada. The Government of Canada is going to court with them. They are what I would call veterans who have been honourable, who have served this country honourably and they are clear-headed individuals from the point of view of knowing that something went dreadfully wrong in theatre, particularly in Somalia. We have a senator, an ex-general who ran the operation in Somalia, who says that we should never be giving mefloquine to our soldiers.

That's the lay of the land here. Something is going on, although it is trying to be discredited by the government, as you can see through their questioning here today that the science isn't quite up to the standard that they would like to see. However, the reality is that we have disabled soldiers, veterans, who are looking to the government to do something, such as Australia has done, such as the United States has moved towards. We had our military witnesses here, and they also said, similar to Dr. Libman's testimony here today, that they are not totally convinced, so it still is an option for our troops.

I suppose that I just would like your reaction to those comments.

Dr. Croft, please.

The Chair: We're running out of time, so make that quick.

Dr. Ashley Croft: If there was no reasonable alternative to mefloquine, then I would say that it would have to be given under careful supervision. However, because there are at least two drugs—I'm talking about doxycycline and atovaquone-proguanil—that are as effective at preventing malaria but that have a much better side effects profile, then, really, it makes no sense to give mefloquine at all, under any circumstances, to the troops. They're a vulnerable population and we need to protect them.

Mr. Phil McColeman: Thank you.

The Chair: Ms. Blaney.

Ms. Rachel Blaney: Thank you both again for this. I'm finding this to be very interesting testimony today.

Dr. Libman, you said in one of your responses that there are always ways to switch to other drugs. I'm just wondering if you could explain to me how that happens in the military. I've heard numerous testimonies about how, historically, they haven't necessarily had that option to switch their medication. In fact, if they come forward to disclose that they're having some of those concerns that the warning label tells them they might have—anxiety, a lack of ability to sleep and so forth—then that would actually potentially have an impact on their career moving forward.

When you say that there are always ways to switch to other drugs, do you have anything to support that in terms of medication that you get in the military?

● (1645)

Dr. Michael Libman: I'm going to have to apologize. I'm not a military doctor, so I can't really comment on when soldiers have issues with this drug or any other drug. I just can't tell you what the mechanism is for deciding what the right thing to do is in that case from a medical point of view.

Ms. Rachel Blaney: Thank you.

Dr. Croft, with regard to that comment about how there are always ways to switch to other drugs, when you are serving your country, is it an easy thing to get your medication switched because of the way you're interacting with it?

Dr. Ashley Croft: I guess it depends where you are. If you're out on a front-line post in Afghanistan somewhere, where you're a long way from the medical aid centre—you might be 40 miles away—you're stuck with what drugs are there. It's not going to be possible to switch easily. That really is the difficulty in the military, that you often won't have access under operational conditions to a unit doctor. It will be difficult, quite apart from the fact we've already touched upon, that if you say, “Well, I don't like this drug because it's making me unhappy”, you're just going to make trouble for yourself because of the kind of stigma that is attached in the military to anyone who's reporting psychological unhappiness or distress.

Ms. Rachel Blaney: I think there's a connection there with the reality that the people who are coming forward are actually veterans and are no longer serving.

Dr. Ashley Croft: Yes, indeed, they're veterans. Now they can say what they wanted to say when they were serving, but couldn't because of the constraints of being in service.

Ms. Rachel Blaney: Thank you. Those are all the questions I have.

The Chair: That ends our time for today. I'd like to thank both witnesses for coming.

An hon. member: I so move