How great are the reinforcing properties? I am using reinforcement here in its psychological sense. If a drug creates a pleasureable effect, so that after its use one feels great, we probably will want to

use it again. Thus begins habituation.

I am presently carrying out a psychoactive drug survey in which I have tried to answer these questions. One such profile that has been engendered is for the drug methylphenidate as shown on the sheet which I have made available to you. There are obviously some benefits, and because of this the drug is readily available. What about risks?

There are probably some with respect to safety, especially in terms of risk-taking behavior. In terms of the social order, yes, there may

be some, but certainly not of a high order.

Methylphenidate is slightly different in a chemical sense from pure amphetamine, but it is a member of and as you probably know, that family. In the World Health Organization convention on psychotropic drugs, methylphenidate is regarded in the same way as other amphetamines are. The recommendation of that particular convention is that methylphenidate should be regulated and subjected to the stringent controls used for amphetamines.

With that, I agree.

In summary, Senator Nelson, I would like to say that I am glad that Canada took some action in 1972 and 1973 to remedy overuse of amphetamines. The drugs which we controlled have remained controlled. We set therapeutic guidelines for their use. We left the door slightly open to physicians in Canada by saying, "If you personally feel you need to use this drug for conditions outside of this list of approved conditions, get in touch with us and we will discuss the situation."

We have had about 250 requests of this type from physicians per year since 1973. The number stays about constant. We have never actually refused to allow a physician to employ amphetamines if in his best judgment he feels he has tried everything else, and this particular

patient needs them.

Despite various arguments from individual physicians. I do not think we want to increase our approved list in any way. The concept of restricting the number of diagnoses as indications for drugs is a new one for our country, and it was necessary to do a fair amount of selling of this to the Canadian Medical Association.

Senator Nelson. When you say restrict, did you mean restricting in-

dications for use?

Dr. Henderson. Yes. For example, if a Canadian physician prescribes benzphetamine or methamphetamine as a stimulant for kids playing ice hockey, he is in fact doing something which is illegal.

Amphetamines are not approved as a stimulant for say, truck drivers who drive all night and want something to stay awake. Neither are they to be used for obesity. A doctor is in fact breaking Canadian law by prescribing a designated amphetamine—for example, phenmetrazine—for obesity.

A physician is allowed to prescribe amphetamines only for the des-

ignated conditions that I earlier outlined.

Physicians in general do not like to be limited. They want to have

total freedom to prescribe as we think is indicated.

I just wish that medical knowledge in clinical pharmacology was a lot better. I think a lot of irrational prescribing was and is going on,