

over a period of time, from 1 to 3 years, who have then come to us and stated that they feel they have during this period of time, been free of using narcotics, stabilized in their lives, do not have the need for narcotics and would like to try without the use of cyclazocine.

There are seven such individuals who we withdrew from cyclazocine, none of whom have become readdicted to date. There were two individuals who requested withdrawal from cyclazocine who shortly after they were off cyclazocine came back and said, "I have the urge to use drugs again; please put me back on cyclazocine," and we did so.

Mr. MANN. So, there is definite potential for the reordering of one's life, perhaps, while under a supervised program?

Dr. RESNICK. No question about that. I think the biggest hope about cyclazocine is that it is not addicting. The individual does not get any kick from it. There is no illicit market for it and he is not addicted to it. It is a very useful tool or crutch for him to be able to conduct his life without heroin and hopefully to be able to reach a point where he no longer has the need to use heroin.

Mr. MANN. Thank you.

Chairman PEPPER. Mr. Blommer?

Mr. BLOMMER. I have no questions.

Chairman PEPPER. Mr. Steiger?

Mr. STEIGER. Thank you, Mr. Chairman.

What are the side effects of cyclazocine?

Dr. RESNICK. The side effects of cyclazocine depend upon how fast we give it.

Mr. STEIGER. What is the worst that can happen? I mean, in the 4-day period.

Dr. RESNICK. The usual, most common side effect in the 4-day period is the patient experiences what he describes as a high and he likens this to being similar to a pot high. Some of them say it is like LSD. Most of them enjoy it. They do not find it uncomfortable or unpleasant.

It is of some interest that we offer them naloxone as a means of reducing the intensity of these side effects. Now, naloxone has that property. So that the procedure is to tell the patient that he is going to be built up on cyclazocine in increasing doses over 4 days and that during this 4-day period he will experience some side effects, none of which are harmful or dangerous, that if he finds that these side effects are too strong for him, if he wishes, he may request tablets, naloxone, which will help to reduce the intensity of these effects, and about 50 percent of the patients go through the induction without using naloxone. The other 50 percent will use naloxone sometime during these 4 days and they do report after they take the naloxone, within about a half hour to an hour the intensity of this feeling subsides.

Mr. STEIGER. If there is an interruption in the administration of cyclazocine and they get back on it in a month, after being off it a month, do they experience this again? Would you anticipate that they would?

Dr. RESNICK. If they have been off cyclazocine for a month and then need to be reinducted on it?

Mr. STEIGER. Yes, sir.

Dr. RESNICK. Exactly the same thing happens.

Mr. STEIGER. Knowing the research community as you do in this particular area, and also knowing the cumbersomeness of this body

and the bureaucracy and the apparently headless effort that is being conducted to develop these drugs, do you think there would be any merit on a very pragmatic basis of a prize established—a bonus or reward of a significant amount of money, a million dollars, perhaps—for the achievement of an antagonist that would last not less than 30 days and whatever the other criteria are that logic would dictate? Do you think that that would produce a response from the research community?

Dr. RESNICK. Yes; I think if they were paid for their efforts they would do the job.

Mr. STEIGER. Assuming they would only be paid if they were successful, obviously, and if they were first. I do not mean a contract now.

Dr. RESNICK. I would not presume to answer that question.

Mr. STEIGER. All right. Winthrop is furnishing you with the cyclazocine; right?

Dr. RESNICK. Yes.

Mr. STEIGER. Do you know if Winthrop is doing anything to make cyclazocine a longer acting substance?

Dr. RESNICK. To my knowledge, no.

Mr. STEIGER. Would it be reasonable to assume that if there were some commercial incentive for them to do so, that they would do so?

Dr. RESNICK. It is reasonable.

Mr. STEIGER. Have they the research capability to do so?

Dr. RESNICK. I do not know.

Mr. STEIGER. Do you know of any laboratory that has the experience or any research organization that has the experience, to make cyclazocine a longer acting substance?

Dr. RESNICK. Oh, yes. I know, as I stated, that we have arranged a contract with a particular biochemical laboratory for this purpose. I am sure there are many throughout the country who have the personnel and the technical know-how to be able to proceed with such studies. I am not a chemist but I do not think the chemical problems are that difficult.

As I said, I think we have the knowledge. We just need the funds to pay people to go through the rigor of testing the different vehicles.

Mr. STEIGER. You apparently have not discussed this possibility with Winthrop but you are in a position to, at least speculate. Why isn't Winthrop interested in extending the effectiveness of this drug, the effective timespan of cyclazocine? Is it not commercially valuable?

Dr. RESNICK. I wish you would ask Winthrop. I can only guess.

Mr. STEIGER. I suspect we might. (See exhibit No. 32.)

Dr. RESNICK. My guess is that it is economic considerations. It is an expensive thing to have to do and if they want to do it, then they want to feel that there is some remuneration for it.

Mr. STEIGER. I have no further questions, Mr. Chairman.

Chairman PEPPER. Mr. Murphy.

Mr. MURPHY. Thank you, Mr. Chairman.

I agree with Mr. Steiger's suggestion that we give an inducement to some chemist or doctor or some laboratory to come up with a cure for this. I am all for taking the lady down from the Capitol and replacing her with whoever comes up with that cure, as it is such an important problem. And I cannot understand why none have not pursued this

with more vigor and funded the program if what you say is true, Doctor. I think a lot of us here in Congress are derelict in our duty and have been derelict in our duty in the past. I know this may sound self-serving because I am a member of this committee, but I commend the chairman, Mr. Pepper from Florida, and the members of the committee for undertaking this study because it is long overdue. I commend you, Doctor, for your work and I agree with Mr. Steiger that it is about time the Federal Government took a lead in this program.

We owe a responsibility to a generation of young Americans that we are not only losing in Vietnam but we are losing back here. This sounds like a Fourth of July statement, but I really feel it and I know that members of the committee feel it. Again, I want to congratulate Mr. Pepper for providing the leadership for this study and this testimony.

Dr. RESNICK. I will second that.

Mr. STEIGER. I wonder if the gentleman will yield. I thought the gentleman might pursue the military aspect of this.

In issuing cyclazocine to the military—much as you made the equation of Atabrine, and, of course, we did it as far as venereal diseases, et cetera; so it is not a unique idea—I wonder what would be the practical difficulties? Is cyclazocine, for example, readily available as far as you know? Would it be available in sufficient quantities?

Dr. RESNICK. To my knowledge cyclazocine is available and could be easily made available. We have not had any trouble. I mean, Sterling-Winthrop has supplied us with as much cyclazocine and other individuals throughout the country who are using it, with as much say we need. There has never been any problem with that.

Mr. STEIGER. All right.

Now, with your clinical knowledge of cyclazocine in its present state of the art, and recognizing the side effects as you do probably better than anybody in the country, do you anticipate that when given to a great number of people as you are suggesting, it would create any particular problems? The side effects, the high, whatever it is?

Dr. RESNICK. I can only answer the question on the basis of my experience and my experience has been with all of the individuals whom I have treated, all of whom, of course, are addicts. I do not know how a nonaddict is going to react to cyclazocine. These are all addicts who have withdrawn from heroin, who have been drug free for a period of time ranging from a week to several weeks and have been placed on cyclazocine. If we build them up on the cyclazocine very slowly they experience minimal or no side effects. If we build them up on the cyclazocine more rapidly they do experience these side effects. But in 100 percent of the cases these side effects diminish, disappear. We have not had a single case of any patient who stopped taking this drug, once he has been built-up, because of side effects. What the results will be in some other population I do not know.

Mr. STEIGER. And there have been no deaths; is that correct?

Dr. RESNICK. No deaths. No illness. No harmful effect.

Mr. STEIGER. Thank you.

Chairman PEPPER. Mr. Winn?

Mr. WINN. Thank you, Mr. Chairman.

Along that same line, in a paper that I believe you and three other doctors presented February 16 and 17 of this year in Toronto, Canada,

you have used some of the same information in your testimony today. You made the statement or the statement was made here:

Efforts at developing a long acting antagonist are imperative until a more logical means of preventing opiate addiction is developed. The present enthusiasm for the legal distribution of methadone or heroin is a spurious solution. Methadone or heroin maintenance substitutes a legal addiction for an illegal one, reducing neither the risks of addiction nor of death.

In other words, methadone is not safe; right?

Dr. RESNICK. I cannot give you the exact figures but in New York City there have been a number of methadone deaths.

Mr. STEIGER. Here, too.

Mr. WINN. Yes; there have been some here, too, of course, and I suppose the other large cities where there is a methadone program.

Dr. RESNICK. I want to emphasize I am not knocking methadone. I think it is very useful.

Mr. WINN. No. I understand you are not knocking it, nor am I, but at the same time I think what you and the other doctors have pointed out in that paper which you gave, and what I am trying to bring out, is that the risks of methadone maintenance are about the same as heroin maintenance as far as deaths are concerned.

Dr. RESNICK. I am not sure that statement is true, Mr. Winn. It is true that patients do take overdoses of methadone and die. It is true that individuals who are not bonafide members of methadone maintenance programs get methadone from people who are on these programs, and die.

Mr. WINN. They also secure them from licensed physicians, which would possibly give them the overdose that would cause them to die.

Dr. RESNICK. That is a possibility. Now, it is also true that many heroin addicts die not only from an overdose of heroin but they die from concurrent illnesses that result not directly from the heroin but from other illnesses that they contract as a result of their using heroin.

Mr. WINN. Now, the gentlemen that testified with Dr. Kurland, who was on naloxone, testified that they had a loss of appetite. That was about the main reaction they felt. Is that same loss of appetite prevalent with users of cyclazocine?

Dr. RESNICK. Loss of appetite is one of the side effects but it is also, as all the others, one that goes away, does not persist. It does not occur in every patient. It does occur with some.

Mr. WINN. I am sorry.

Dr. RESNICK. It does not occur with every patient. But any patient who has been on cyclazocine maintenance, taking it regularly over a period of time, in my experience, whatever side effects he experienced initially, all of these side effects disappeared and they tell us they take this cyclazocine and have the same effects as if they drank a glass of water.

Mr. WINN. Then should there be, or do you in your experiments, have a nutrition substitute to counteract that loss of appetite or are we really talking about anything that is that serious?

Dr. RESNICK. It is not serious.

Mr. WINN. Not that serious.

Dr. RESNICK. No.