sale of marihuana or any other drugs whose sale is prohibited by law?

Dr. Goddard. No, sir.

The CHAIRMAN. Well, based upon the studies that you have conducted, does it appear that a person can become addicted to any of the following drugs: the amphetamines, barbiturates, LSD and the like, marihuana, and the hard narcotics?

Dr. Goddard. Yes. There is no question that persons can become addicted to the hard narcotics, the opiate derivatives of which heroin is one. Addiction implies that the individuals are taking increasing dosages and that they have physical withdrawal symptoms from the drug.

With respect to the amphetamines, the other drugs we have mentioned, LSD and the other hallucinogens, we do not see addiction, as such. We do see psychic dependence; we do see development of

tolorence.

For example, people rapidly go to tolerance in the amphetamines. They may take heavy dosages at one time, for example, several hundred milligrams instead of the usual dosage of 5 milligrams, dosages so large that they could be fatal in any of us who have not taken the

drug.

We now talk more in terms of drug dependence than getting caught in the argument of addicting, nonaddicting, and get into the semantic problems that existed in the past. Alcohol is still another drug that one can develop physical dependence upon and have withdrawal symptoms occur. Barbiturates also can cause physical dependence.

The CHAIRMAN. Now, that was my next question. Does alcohol cause

addiction?

Dr. Goddard. I would rather call it physical dependence, rather than addiction. This is measured by the increasing dosage that is required by the person to obtain the same effect; in other words, what we commonly call tolerance and the withdrawal symptoms that occur when the drug alcohol is withdrawn.

What we commonly refer to as the "DT's" are the physical manifestations of withdrawal sysmptoms in the individual who has developed a physical dependence to alcohol. As I have tried to point out, alcohol does represent a serious problem to our society. Many times I have also mentioned that marihuana and other drugs are abused.

These problems of drug abuse and the problem of alcohol are very much alike; they are manifestations of problems in society that we have to approach realistically; we have to recognize their presence and we have to begin to develop programs which will help solve these problems.

The CHAIRMAN. Excuse me. Is there a study now being made in your

Department on alcohol?

Dr. Goddard. Yes.

The CHAIRMAN. Who is making it?

Dr. Goddard. Both through the support of research, and recently we have published what represents a comprehensive summary of our present knowledge about alcohol and alcoholism from the NIMH national clearinghouse for mental health information.

I could provide you, if you wish, Mr. Chairman, for the record, the scope of the studies that are being carried out, the activities that

are underway.