Dr. Cluff. I would like to read if I may, Senator Nelson, a very brief statement which summarizes the statement that I presume you have before you.

Senator Nelson. Yes.

Dr. Cluff. I shall read this if I may. It is very brief, but I think it summarizes the position and interpretations that are predicated upon the statement that you have before you.

Senator Nelson. All right.

Dr. Cluff. An important factor in the cost of drugs for the patient is the number of drugs consumed or prescribed as well as the cost of an individual drug. Drugs are used excessively by the public and are prescribed excessively by physicians.

Curtailment of excessive and indiscriminate use of drugs probably would have as great, if not greater impact upon expenditures for drugs

as minor adjustments in drug prices.

A significant and lasting influence on drug consumption will occur only through changes in attitudes toward, and improve awareness of the uses and abuses of drugs by the public and medical profession. These changes could be fostered by development and use of educational media and by more judicious and rational drug advertising.

A cooperative venture by the Government, the pharmaceutical manufacturers, and the medical profession, providing for public education

and medical education in the rapeutics is needed.

Senator Nelson. I have some questions. It would be helpful if you

would read your complete statement, Doctor.

Dr. Cluff. All right, and perhaps you can interrupt me if you wish as I go along.

Senator Nelson. Yes.

Dr. Cluff. The introductory comments are perhaps not pertinent because in essence I have already said that. This is largely biographical

background.

While I was professor of medicine at the Johns Hopkins University, epidemiological studies of drug usage and adverse reactions to drugs were done on hospitalized patients during 1962 to 1966. These studies are now being continued at the Shands Teaching Hospital of the University of Florida. Observations made during these studies serve as the basis for this statement and are briefly outlined below. All of these statements are based upon the findings that I have obtained in my own investigative work.

Observations: (1) 4 to 5 percent of patients admitted to the medical service of a general hospital are found to have adverse reactions to drugs and 3 to 4 percent of all medical service patients are admitted because of illnesses caused by drugs. About 10 percent of patients ex-

perience ill effects from drugs while hospitalized.

Senator Nelson. What percentage of the patients who are admitted for adverse reaction to drugs, what percentage of that group could

have avoided such reactions if the physicians prescribing—

Dr. Cluff. You are asking for proportions and that is a difficult thing to give you exactly. I don't think there is any question but that some of these could be avoided by the more judicious use of drugs or at least the physician paying greater attention to ill effects that the patient had previously experienced. There are many examples of this which I could cite and I would be happy to do so if you wish.