and about half of that 95 percent give an antibiotic and there is no virus controlled by it.

Dr. BEAVER. And hopefully, they no longer give chloramphenicol. After your hearings it went down a long way. I think that was a very extremely valuable result of our hearings. It is true that from an objective standpoint, doctors often practice less than optimal medicine, but as I said, there are a lot of patients who come into the doctor's office and say they have already tried aspirin or acetaminophen and it has not helped, so the option the doctor has is to give this or something else.

Senator NELSON. Well, a little while back you said something about agreeing with Dr. Moertel, but let me read to you his last paragraph of his statement yesterday.

Dr. BEAVER. Well, this was not his statement yesterday. I was talking about a paper published in the Australian-New Zealand Medical Journal where he gave a hierarchy of how he would treat pain starting with aspirin and acetaminophen, and if that did not work, he would add codeine at certain dose levels, and if that did not work, he would go to larger doses of orally effective narcotics and if that did not work, he would go to injections. There is that hierarchy and we would not be that much at variance.

Can I just finish this statement?

Senator NELSON. Sure. Go ahead.

Dr. BEAVER. There are a larger number of unresolved issues here concerning the benefit/risk ratio of Darvon and its place as an analgesic, and these deserve further study.

Since a majority of fatal propoxyphene overdoses seem to result from mixed intoxication with propoxyphene and other central nervous system depressants, some effort should be directed at determining whether propoxyphene is simply adding to the depressant effects of other drugs or is producing a supra-additive interaction which is particularly hazardous.

Second, although the descriptions of fatal poisoning with propoxyphene which I have studied suggest that this drug is producing death in the same way as any classical narcotic overdose—albeit, the overdose syndrome is usually complicated by the presence of convulsions—studies should be done to determine whether propoxyphene has a direct cardiovascular toxicity in excess of other narcotics, and further studies should be done to elucidate the role of nor-propoxyphene in the toxicity produced by propoxyphene.

Three, since codeine-containing combinations are the logical alternative to existing Darvon combinations and are prescribed to an even greater extent than Darvon combinations it would appear logical to make a concerted effort to determine whether the apparent lower incidence of codeine-related deaths is a real phenomenon and, if so, why?

Four, controlled analgesic studies involving repeated dose administration of propoxyphene compared to other mild analgesics should be done to determine whether the predicted increase of efficacy of propoxyphene on repeated-dose administration really occurs.

Dr. McBay feels that codeine is very rarely related to overdose death. The DAWN data would indicate it is lower than propoxyphene. This needs to be clarified, because if codeine is truly extremely seldom