June 27, 1970

Dr. Jonathan O. Cole, M.D.
Boston State Hospital
Boston, Massachusetts

Dear Jon,

It is a pleasure to respond to your questions of the ability of post-addicts to recognize heroin and to distinguish its effects from other compounds. Our data may indeed be relevant.

In a variety of studies, we have administered heroin (15 to 25 mg/2cc/2 minutes), saline, cyclazocine (0.2 to 1.0 mg/2 cc/ 2 minutes) and naloxone (0.4 to 1.8 mg/2 cc/2 minutes) to post-addicts (3-20 days after last doses of methadone) and to subjects receiving chronic oral methadone (100, 150 and 200 mg/ oral/day).

The subjects are young male addicts, between 20 and 35 years of age, with histories of opiate use for at least 2 years. Our sample consists of 35% Puerto Rican and 50% negro. They are voluntary admissions to Metropolitan Hospital and their cooperation is obtained for these experiments by indicating that these tests are necessary as prerequisites to chronic maintenance therapies with cyclazocine or methadone.

The studies have been in progress for 4 years, add in this time we have examined more than 100 subjects in more than 400 experiments.

Based on this experience, I believe the following conclusions are applicable to your questions.

1. Can addicts recognize heroin, given intravenously and double blind?

Post-addicts have no difficulty in immediately identifying 25 mg heroin. They make occasional errors with 15 mg, indicating a difficulty in positively identifying this quantity. They identify cyclazocine as a non-opiate substance, and naloxone has always been called a 'blank'.

Subjects receiving 100-200 mg methadone daily, cannot identify 25,50, and 75 mg heroin for up to 48 hours; thereafter they rapidly identify the small doses of heroin, not only by direct heroin effects, but by the relief of withdrawal which is present about 48-60 hours.

For post-addicts and methadone subjects after 60 hours, the administration of heroin is accompanied by a sequence of experiences described in such a ritualistic fashion as to make us believe that the effects are commonly experienced. The subjects are tense as the injection is first made, and after 1.0 to 1.5 cc, they relax, smile, and tell us that this 'is it'; they feel warm 'all over'; and within 2-3 minutes, are comfortable, drowsy, cooperative and tell us that they are 'high'.

When a placebo, naloxone, or cyclazocine are given, this sequence is not apparent. They remain tense, complain that the 'stuff is no good', and do not become drowsy.

For the patients who have had morphine, they tell us that our stuff does not feel like morphine since they lack the skin tingling which is characteristic of morphine.

I would conclude, that addicts can tell 'good stuff' from the effects. The amount necessary in our subjects is 20-25 mg. (The clinical effects are accompanied by characteristic EEG changes; and in the methadone treated subjects, bedore 48 hours, the EEG effects are indeed absent, as are the behavioral effects).

2. Our addicts can discriminate heroin from the substances indicated above. They can also tell heroin from alcohol and barbiturates, if I am to believe their reports, but we have never made direct experiments along these lines.

I have never tested the ability of our subjects to distinguish among opiates.

I trust these responses are helpful. While I do not have specific data to answer the questions posed in the way you posed them, I will send the reprints and preprints available, and these may be useful in supporting your evidence.

If it is of any help, we can be available to support your presentation.

My best regards, and I do appreciate the opportunity to answer these interesting questions.

Sincerely yours,

Max Fink, M.D.
Professor of Psychiatry

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June 24, 1970

Dear Costas,

Finally, I have very good news ! During the past month, the grants management staff of the N.I. M. H. have met with me on three occasions; each time we resolved another problem and today, they signed a contract allowing us to undertake the study we discussed more than 15 months ago. The problem of cannabis is still acute, and despite many new studies, there is still confusion about the possibility of chronic effects.

The contract permits the International Association to subcontract with scientists in Athens to study the problem of the chronic effects on brain function and behavior of cannabis. The goal is to study as many men as may be found who have been taking cannabis regularly for extended periods; to measure the degree to which brain dysfunction may have occurred; to undertake acute experiemnts, in which the EEG, memory and perceptual changes of cannabis smoking may have an effect and to record the changes, with analyses completed in Athens or in New York. We are also hoping to have supplies of cannabis from the men themselves, with portions smoked and others analyzed in your laboratory. In addition, we are permitted to ask that some THC be extracted and tested in these clinical trials.

I do not know how much can be done. The original protocol has been accepted, with few modifications. It seems best that I arrange to meet with you during my forthcoming trip to Europe, and that a more definitive protocol be worked out; particularly one in which the work is detailed so that the proper staff can be recruited and a work schedule prepared.

Dr. Freedman will also be in Europe this August and I hope that he will have an opportunity to meet with you and discuss his goals for this project. Unfortunately, I do not think I will be in Athens at the time he may be available.

As my plans now stand, I will attend the Turkish C.N. P. meetings from August 17 to 21, and can be in Athens from the afternoon of August 21 for the next few days. If that is not satisfactory, I could take my family to Israel for some days and arrive in Athens August 25-27.

We look forward to working with you, Dr. Stefanis and your respective associates. I hope that we will be able to make a contribution to the definition of the problem of the effects of cannabis.

My best personal regards.

Sincerely yours,

Max Fink, M.D.