NOMINATIONS

HEARING

BEFORE THE

COMMITTEE ON HUMAN RESOURCES
UNITED STATES SENATE

NINETY-FIFTH CONGRESS

FIRST SESSION

ON

PETER G. BOURNE, OF THE DISTRICT OF COLUMBIA, TO BE DIRECTOR, OFFICE OF DRUG ABUSE POLICY

AND

LEE I. DOGOLOFF, OF MARYLAND, TO BE DEPUTY DIRECTOR, OFFICE OF DRUG ABUSE POLICY

MAY 13, 1977

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FRIDAY, MAY 13, 1977

U.S. SENATE,
COMMITTEE ON HUMAN RESOURCES,
Washington, D.C.

The committee met, pursuant to notice, at 9:15 a.m., in room 4232 Dirksen Senate Office Building, Senator Harrison A. Williams, Jr. (chairman) presiding.

Present: Senators Williams and Hatch.

The CHAIRMAN. The Committee on Human Resources will please come to order.

The meeting today is to consider the nomination of Dr. Peter G. Bourne of the District of Columbia to be Director of the Office of Drug Abuse Policy, and Mr. Lee Israel Dogoloff of Maryland to be Deputy Director of the Office of Drug Abuse Policy.

I have some opening remarks, which will come following the introduction of our two nominees by Senators who accompany them. Senator Nunn is here, and he will introduce Dr. Peter Bourne.

STATEMENT OF HON. SAM NUNN, A U.S. SENATOR FROM THE STATE OF GEORGIA

Senator NUNN. Thank you very much, Mr. Chairman.

It is a pleasure for me to appear before you today for the purpose of introducing President Carter's nominee for the position of Director of the Office of Drug Abuse Policy, my good friend Dr. Peter G. Bourne.

In my opinion, Dr. Bourne is one of the Nation's leading authorities on the subject of drug abuse. He has been functioning as the Special Assistant to the President for Drug Abuse and Mental Health matters since the inception of this administration. Although Dr. Bourne's prior efforts have been largely directed toward the treatment and prevention aspects of drug abuse, he has begun working closely with Peter Bensinger, Administrator of the Drug Enforcement Administration, in assessing the effectiveness of our Federal narcotics enforcement effort.

By virtue of having chaired weeks of hearings in the permanent Subcommittee on Investigations on the subject of drug abuse, calling upon scores of witnesses for their analysis, I believe I have gained a substantial appreciation for the complexities of this critical area.

In human terms alone, more than 5,000 Americans a year die as a result of drug abuse. The number of hard narcotics addicts has increased from an estimated 315,000 in 1969 to over 700,000 in 1976.

Additionally, law enforcement officials estimate that addicts account for as much as 50 percent of all street crimes—robberies, muggings, and burglaries—to support their habits.

The financial drain of this problem to Government has been and continues to be enormous. The Federal Government alone spent over three quarters of a billion dollars in 1976 to combat the problem—up from $82 million in 1969. The number of addicts has a little over doubled while the Federal budget has increased almost tenfold. With these facts as background, it is easy to understand why drug abuse is one of the most serious problems facing our country.

Dr. Bourne's proposed new role is of importance to this committee and to the American people. The Office of Drug Abuse Policy was created by Congress in 1975—but languished until the new administration recognized its potential. This Office, under Dr. Bourne's proposed direction, will coordinate not only prevention and treatment efforts in the drug area—but enforcement efforts as well. The interrelationship between these two aspects of the drug problem is too often overlooked.

Solutions to our drug abuse problems will not be found in tidy, clear-cut answers. At the same time, the problems must be faced and solved. The well-being of our Nation depends upon it. I believe that Peter Bourne possesses the background and capabilities which will enable him to make a substantial contribution to the search for and implementation of a successful drug abuse policy. His strong background in the treatment and prevention area, coupled with his willingness to learn from experts in the enforcement area, make him a sound choice as Director of the Office of Drug Abuse Policy.

Mr. Chairman, for these reasons, it is my pleasure to present President Carter's nominee for the Director of the Office of Drug Abuse Policy, Dr. Peter Bourne, for this committee's consideration.

I urge his approval.

Thank you very much.

The CHAIRMAN. Senator Nunn, thank you for a very helpful statement, especially since you have had particular knowledge of Dr. Bourne. We are helped greatly.

Senator NUNN. Thank you.

The CHAIRMAN. We will turn now to Senator Eagleton, who will introduce the nominee for Deputy Director.

STATEMENT OF HON. THOMAS F. EAGLETON, A U.S. SENATOR FROM THE STATE OF MISSOURI

Senator EAGLETON. Thank you very much.

With the concurrence of Senators Sarbanes and Mathias, I am pleased to present to this committee Mr. Lee I. Dogoloff of Baltimore, Md., as the nominee for Deputy Director of Office of Drug Abuse Policy. He has a rich background and extensive experience with drug programs at the local, State, and Federal levels of Government.

In addition, he has represented the U.S. Government at the International Conferences, and has provided technical assistance to a number of countries, including Iran, Venezuela, Thailand, et cetera, as those countries developed their own programs.

He previously served as Director of the Division of Community Assistance at the National Institute on Drug Abuse. Prior to that he was Director of Government Assistance in the Special Action Office for Drug Abuse Prevention.

Mr. Dogoloff has also served as Deputy Administrator of the Narcotics Treatment Administration in Washington, and Coordinator of the Community Services for the District of Columbia Department of Corrections.

I am very pleased to present Mr. Dogoloff now, Mr. Chairman, and I am sure that when confirmed, he will work in close harmony and very constructively with Dr. Bourne, as previously introduced by Senator Nunn.

The CHAIRMAN. We appreciate your statement of introduction and support of Mr. Dogoloff.

You, too, will be very helpful to the members of our committee as we consider these nominations.

In 1972 Congress enacted the Drug Abuse Office and Treatment Act, the purpose of which was "to focus comprehensive resources of the Federal Government and bring them to bear on drug abuse."

That act created the Special Action Office for Drug Abuse Prevention, to provide overall planning and policy and establish objectives and priorities for all Federal drug abuse prevention functions.

In the belief that the drug abuse "epidemic," which seemingly developed so quickly, could be turned around just as quickly by a comprehensive, coordinated Federal effort, the 1972 act provided for termination of the Special Action Office on June 30, 1975.

Unfortunately, it became apparent that the national optimism concerning control of drug abuse was premature. The Congress, in early 1976, decided that a modified version of the Special Action Office, to be called Office of Drug Abuse Policy, should be maintained within the Executive Office of the President.

I am pleased that President Carter has seen fit to activate the Office of Drug Abuse Policy, and has chosen two men of vast experience to serve as Director and Deputy Director of that Office.

They have been abundantly and completely introduced, and I will say nothing further, except that I am very pleased gentlemen, that you have been nominated to these critical positions.

At this point I wish to include in the record the biographical sketches of the nominees.

[The information referred to follows:]

CURRICULUM VITAE: PETER G. BOURNE

BORN: Oxford, England; August 6, 1939; U.S. Citizen

PRESENT POSITION

Special Assistant to the President of the United States

EDUCATION

Primary and Secondary Education in England

College

1953-1957 Whitgift, England
1957-1958 Emory University, Atlanta, Georgia

1958-1962 M.D., Emory University Medical School
1967-1969 M.A., (Anthropology), Stanford University, Palo Alto, California
1962-1963 Fellow, Department of Psychiatry, Emory University Medical School
1963-1964 Intern, King County Hospital, Seattle, Washington
1967-1969 Resident, Department of Psychiatry, Stanford University Medical Center, Palo Alto, California

EMPLOYMENT

1975-1976 Mid-Atlantic Coordinator (subsequently Deputy Campaign Director), Jimmy Carter Presidential Campaign

1975-1976 President, Foundation for International Resources

1974-1976 Consultant, Drug Abuse Council, Washington, D. C.

1972-1974 Assistant Director, White House Special Action Office for Drug Abuse Prevention

1971-1973 Special Advisor to Governor Jimmy Carter of Georgia for Health Affairs

EMPLOYMENT CONT'D

1971-1972 Director, Office of Drug Abuse (originally Georgia Narcotics Treatment Program)

1970-1971 Founder and Director, Atlanta South Central Community Mental Health Center (Georgia's first Community Mental Health Center)

1969-1971 Director, Mental Health Unit, Southside Comprehensive Health Center, Atlanta, Georgia

1966-1967 Consultant, S.E. Asia Health Branch (AID), Department of State

1965-1966 Chief, Neuropsychiatry Section, U.S. Army Medical Research Team - Viet Nam
(Walter Reed Army Institute of Research)

1964-1967 Research Psychiatrist, Walter Reed Army Institute of Research, Washington, D. C.

1962-1963 Co-Director of Emory University Alcoholism Project

-- Established treatment programs for arrested alcoholics in the Atlanta City Jail

OTHER CONSULTANT AND PART-TIME POSITIONS

1976 Consultant, United Nations, Division on Narcotic Drugs

1972 Consultant, World Health Organization, Geneva

1969-1969 Psychiatric Consultant, San Mateo County Hospital, San Mateo, California

1968-1969 Psychiatric Consultant, Santa Clara County Hospital, Santa Clara, California

1967-1969 Emergency Room Physician, Kaiser Permanente Hospital, Santa Clara, California

OTHER CONSULTANT AND PART-TIME POSITIONS CONT'D

1967-1969 Participated in the establishment and worked as a part-time physician at the Haight-Ashbury Free Medical Clinic

1966-1967 Emergency Room Physician, Casualty Hospital, Washington, D. C. (now Rogers Memorial Hospital)

FACULTY APPOINTMENTS

1969-1972 Assistant Professor, Department of Psychiatry, Emory University Medical School, Atlanta, Georgia

1969-1972 Assistant Professor, Department of Preventive Medicine and Community Health, Emory University Medical School, Atlanta, Georgia

1974 Visiting Lecturer, Department of Psychiatry, Harvard Medical School

ORGANIZATION MEMBERSHIP

Medical Association of Georgia
American Association for the Advancement of Science
Washington Psychiatric Society
American Psychiatric Association
Georgia Psychiatric Association
Royal Society of Medicine
American Medical Society on Alcoholism
American Anthropological Association
World Federation for Mental Health

Editorial Board - Psychiatry
Editorial Board - American Journal of Drug and Alcohol Abuse

MILITARY SERVICE

1964-1967 Captain, U.S. Army
Bronze Star
Air Medal
Combat Medics Badge

Primary Assignment - Research Psychiatrist, Walter Reed Army Institute of Research, Washington, D. C.

SPECIFIC INTERNATIONAL EXPERIENCE

1966-1967 Consultant, S.E. Asia Health Branch, A.I.D.

1973- Present Consultant, World Health Organization

In 1973 I set up the International Activities Division of the White House Special Action Office for Drug Abuse Prevention. Prior to leaving the Government in March 1974, and since that time, I have provided overseas consultation for A.I.D., Department of State, the National Institute on Drug Abuse, the Colombo Plan, and individual foreign governments in the following countries, Mexico, Colombia, Bolivia, Hong Kong, Taiwan, Indonesia, Laos, Thailand, South Viet Nam, Burma, India, Pakistan, Malaysia, Singapore, France, Sweden, Iraq and the Netherlands. During this time I also participated in specialized conferences in Britain, Denmark, Yugoslavia and Japan.

OTHER PROFESSIONAL AND CIVIC ACTIVITIES

Chairman, Task Force on Drugs and Drug Abuse Education, American Psychiatric Association 1969-

Member of the Board, Institute for Southern Studies 1969-

Vice President, National Coordinating Council on Drug Abuse Education 1971-1972

AWARDS

1967: William C. Menninger Award
Central Neuropsychiatric Association

1971: "Five Outstanding Young Men of 1971" (Atlanta Jaycees)
Atlanta, Georgia

1972: "Five Outstanding Young Men in Georgia-1972"
(Georgia Jaycees)

1974: Public Service Award, National Association of State Drug Abuse Program Coordinators

Licensed to practice medicine and surgery in Georgia, California, District of Columbia, Massachusetts and Colorado.

Private Pilot's License

BIBLIOGRAPHY

1. Alford, J. A.; Bowcock, J. Z.; and Bourne, P. G. "The Atlanta Study on Alcoholism," Emory University, Atlanta, Georgia, 1963.

2. Bourne, P. G.; Bowcock, J. Z.; and Alford, J. A. "Treatment of Skid-Row Alcoholics with Disulfiram," Quarterly Journal of Studies on Alcohol, Vol. XXXVIII (1966), 42-48.

3. Bourne, P. G. "Combat Fatigue," Medical Bulletin, United States Army, Viet Nam, Vol. I (1966), 11-12.

4. Bourne, P. G. "Some Observations on the Psychosocial Phenomena of Basic Training," Psychiatry, Vol. XXX (1967), 187-196.

5. Bourne, P. G. "Social Science Studies in Viet Nam," Current Trends in Army Social Work, Walter Reed Army Institute of Research, Washington, D. C., November, 1966.

6. Bourne, P. G.; Coli, W. M.; Datel, W. E. "Anxiety Levels of Six Helicopter Ambulance Medics in a Combat Zone," Psychological Reports, Vol. XIX (1965), 821-822.

7. Bourne, P. G.; Rose, R. M.; Mason, J. "17-OHCS Levels in Combat: Data on 7 Helicopter Ambulance Medics," Archives of General Psychiatry, Vol. XVII (1967), 104-110.

8. Bourne, P. G. "Stress in Helicopter Personnel," Editorial, Journal of the American Medical Association, Vol. 201 (1967), 104-105.

9. Bourne, P. G., and San, N. D. "A Comparative Study of Neuropsychiatric Casualties in the United States Army and the Army of the Republic of Viet Nam," Military Medicine, Vol. 132 (1967), 904-909.

10. Bourne, P. G., and Gaines, S. "An Outbreak of Typhoid Fever in a Special Forces 'A' Camp," Military Medicine, Vol. 132 (1967), 987-992.

11. Bourne, P. G.; Coli, W. M.; and Datel, W. E. "Affect Levels in 10 Special Forces 'A' Team Members Under Threat of Attack," Psychological Reports, Vol. 22 (1968), 363-366.

12. Bourne, P. G.; Rose, M.; and Mason, J. "17-OHCS Levels in a Special Forces 'A' Team Under Threat of Attack," Archives of General Psychiatry, Vol. 19 (1968), 135-140.

13. Bourne, P. G., "Psychiatric Research in Viet Nam," in Symposium on Social and Preventive Psychiatry, Washington, D. C.: Walter Reed Army Institute of Research, January, 1967.

14. Rose, R. M.; Bourne, P. G.; Poe, R. O.; Mougey, E. H.; Collins, D. R.; and Mason, J. W., "Androgen Responses to Stress," Psychosom. Med. 31:418-436, 1969

15. Bourne, P. G. "Altered Adrenal Function in Two Combat Situations," presented at the Annual Meeting of the American Association for the Advancement of Science, Dallas, 1967.

16. Bourne, P. G., "Military Psychiatry and the Viet Nam Experience," American Journal of Psychiatry, 127, 481-488, 1970.

17. Bourne, P. G., "Reforming the Judicial System," Atlanta Journal, May 24, 1969

18. Bourne, P. G., "Suicide Among Chinese in San Francisco," American Journal of Public Health, June, 1973.

19. Bourne, P. G., "The Viet Nam Veteran: Psycho-Social Casualties," Psychiatry in Medicine, March, 23-27, 1972.

20. Bourne, P. G., "Is Drug Abuse a Fading Fad?" Journal of the American College Health Association, 21, 198-200, 1973.

21. Bourne, P. G.; Slade, J.; and Farkas, M., "Development of a Statewide Narcotics Treatment Program," Proceedings of the 4th National Methadone Conference, San Francisco, January 1972.

22. Bourne, P. G. "The Inner-City: Inside Look," Atlanta Journal, November 21, 1970.

23. Bourne, P. G., "The Treatment of Narcotics Addiction in Georgia," Journal of the Medical Association of Georgia, October, 1972.

24. Bourne, P. G., "The Dilemma of Protracted Death," Atlanta Medicine, July, 1972.

25. Bourne, P. G., and Hall, A. L., "Indigenous Therapists in a Black Urban Community in the South," Arch. Gen. Psychiat., 25, 1972.

26. Pieper, W. A.; Skeen, M. J.; McClure, H. M.; and Bourne, P. G., "The Chimpanzee as an Animal Model for Investigating Alcoholism," Science, 176, 71-73, 1972.

27. Bourne, P. G., "Comments on the American Soldier and the Vietnamese Woman," Sexual Behavior, May, 1972, 12.

28. Bourne, P. G., "A Community Mental Health Center for the Urban Poor," Publication pending.

29. Bourne, P. G., "The Hippocratic Revolt," Ramports, July, 1967.

30. Bourne, P. G., "The Treatment of Alcoholism in Atlanta," Atlanta Medicine, February, 1973.

31. Bourne, P. G., "Changing Federal Role in Drug Abuse Prevention," Nations Cities, 4, April, 1973.

32. Bourne, P. G., "Careers in Drug Addiction," in Career Directions, Sandoze Pharmaceuticals (D. J. Publications) 3: 1972.

33. Bourne, P. G., and Slade, J., "Methadone: The Mechanism of Its Success," Jour. Nerv. and Mental Diseases, 159, 371-375, 1974.

34. Bourne, P. G., "Mental Illness and the Chinese," Atlanta Journal, July 20, 1972.

35. Bourne, P. G., "Drug Abuse in the Aging," Perspective on Aging, 3, May-June, 1973.

36. Bourne, P. G., "Where the Present Drug Scene is Heading," Journal of Drug Issues, Vol. 3, 1, 1973.

37. Bourne, P. G., "Human Resources: A New Approach to the Dilemmas of Community Psychiatry," Amer. Jour. of Psychiatry, June, 1974.

38. Bourne, P. G., "The Chinese Student--Adaptation and Mental Illness," Psychiatry, 38, 269-277, 1975.

39. Bourne, P. G.,"Polydurg Abuse, Considerations in a National Strategy," Amer. Jour. Alcohol and Drug Abuse, May, 1974.

40. Bourne, P. G., "Approaches to Drug Abuse Prevention and Treatment in Rural Areas," Jour. Psychedelic Drugs, June, 1974.

41. Benvenuto, J., and Bourne, P. G.,"The Federal Polydrug Abuse Project: Initial Report," Jour. Psychedelic Drugs, 7, 115-120, 1975.

42. Bourne, P. G., and Ramsey, R. S., "The Therapeutic Community Phenomenon," Jour. Psychedelic Drugs 7, 203-207, 1975.

43. Bourne, P. G.,"Non-Pharmacological Approaches to the Treatment of Drug Abuse," Amer. Jour. of Chinese Med. 3, 235-244, 1975.

BOOKS AND BOOK CHAPTERS

Bourne, P.G., (Ed.), Psychology and Physiology of Stress, Academic Press, New York, 1969.

Bourne, P.G., "Urinary OHCS Levels in Two Combat Situations," in Psychology and Physiology of Stress, Academic Press, New York, 1969.

Bourne, P.G., "Military Psychiatry and the Viet Nam War in Prespective," in Psychology and Physiology of Stress, Academic Press, New York, 1969.

Bourne, P.G., Men, Stress, and Viet Nam, Little, Brown and Company, Boston, 1970.

Gulevich, G., and Bourne, P.G., "Violence and the Mentally Ill," in Violence and the Struggle for Existence, (Daniels, D.W., Gilula, M.F., and Ochberg, F.M., Eds.), Little Brown and Company, Boston, 1970.

Bourne, P.G., "Altered Adrenal Function in Two Combat Situations, "in The Physiology of Aggression and Defeat, (Eleftheriou, B., and Scott, J.M., Eds.), University of Chicago Press, Chicago, 1970.

Bourne, P.G., "The Psychological Aspects of Combat," in The Psychological Aspects of Stress, (Abrams, H., Ed.), Thomas and Company, Springfield, 1970.

Bourne, P.G., "The Psychological Aspects of Military Service with Implications for a Democratic Society," in Conscience and Command, (Finn, J., Ed.) Random House, New York, 1970.

Bourne, P.G., "From Boot Camp to My Lai," in Crimes of War, (Lifton, R., Koldo, G., and Falk, R., Eds.), Random House, New York, 1971.

Bourne, P.G., "Military Adjustment," in Human Behavior in a Changing Society, (Adams, F., Ed.), Holbrook Press, Boston, 1973.

Bourne, P.B., and Fox, R., (Eds.), "Alcoholism: Progress in Research and Treatment," Academic Press, New York, 1973.

Bourne, P.G., "Alcoholism in the Urban Negro Population," in Alcoholism: Progress in Research and Treatment, Academic Press, New York, 1973.

Bourne, P.G., (Ed.), "A Treatment Manual for Drug Abuse Emergencies," To be published by the National Clearing House for Drug Abuse Information.

Bourne, P.G., (Ed.), "Addiction," Academic Press, New York, 1973.

Bourne, P.G., "Issues in Addiction," in Addiction, (Bourne, P.G., Ed.), Academic Press, New York, 1973.

Bourne, P.G., "The Comprehensive Treatment of Alcoholism," International Encyclopedia of Psychiatry, Psychoanalysis and Psychology, (Ed. B. Wolman), 1974.

Bourne, P.G., "Treatment of Alcoholism," Current Psychiatric Therapies, Vol. 14 (Ed. J. Masserman), New York, Grune & Stratton, 1974.

Bourne, P.G., "Cannabis," International Encyclopedia of Psychiatry, Psychoanalysis and Psychology, (Ed. B. Wolman), 1974.

Bourne, P.G. "Methadone; Benefits and Shortcomings," Drug Abuse Council, Washington, D.C., 1975.

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[From RAMPARTS, 1967]

The Hippocratic Revolt
The Army Physician and Vietnam

by Peter G. Bourne, M.D.

The role of the physician, with his dedication to the service of humanity, is fully antithetical to that of a military officer. The physician's primary commitment is the saving of lives, whereas the military officer is inevitably involved in the destruction of his fellow men. Perhaps most sacred to those who practice the art of medicine is the physician-patient relationship, in which one individual places himself in the hands of another whose ethical and scientific judgment he trusts. The autonomy of the physician and his ability to make personal judgement is an integral part of this relationship.

An historical accommodation has allowed the armies of the world to enjoy the physician's services without the latter feeling that their professional ethics were being compromised. As spelled out in the Geneva Convention, doctors and others performing medical functions were regarded as non-combatants who were expected to care for the sick and wounded in their own army as well as to meet the medical needs of any enemy who might fall into their hands. In this capacity they were accorded special privileges and were considered immune from attack by the enemy. However, at the same time they could not themselves engage in or be a party to acts of war.

This was an arrangement which most physicians found themselves able to accept and work comfortably with during World War II and the Korean War. They did not engage in combat; they carried arms only to defend themselves or their patients, and their job in caring for the sick and wounded was carefully defined out. At the same time, they were trained to train enlisted men who would be assist them in the care of patients and who would be qualified in first aid, etc. to go out into combat areas to retrieve casualties under fire.

Unfortunately, the Vietnam war does not fit the old pattern, and it has presented the physician with a completely new set of circumstances with which his old view of the ethics of military medicine do not equip him to deal. Due to a sudden awareness by our military leaders that medicine can be used for politico-military ends, the physician in Vietnam has suddenly found himself an integral part of the offensive war effort.

The military-medical ethics of World War II and Korea have not yet caught up with this new type of warfare, leaving the military physician uncertain as to where his allegiances and ethical responsibilities lie. This confusion is further aggravated for some Army physicians because of their fearful suspicions that our presence in Vietnam is immoral.

There can be little doubt that our desire to provide medical care for Vietnamese civilians is basically generated by humanitarian concern. It was primarily with this in mind that the Army conceived the idea of the Special Forces (Green Beret) medic as a means to provide medical care for an indigenous population. Army physicians were asked to train these men to function in place of doctors in areas of Vietnam where no other care was available. This concept, however, met with considerable opposition from the civilian medical community in this country. This opposition was based on two factors: not only does the Special Forces medic practice as a physician with only one year of training, but he is also primarily a combat soldier.

The overwhelming majority of doctors in the Army are civilians who are drafted into the service for two years. These are the doctors who provide the bulk of patient care, and they are the ones most acutely aware of the conflict existing between doctors and the demands of the military. For this group the political ambiguities of the Vietnam war have added considerable strain to what was already a barely acceptable relationship and, at best, an uneasy compromise between their roles as physicians and Army officers.

The doctor-draftee enters the service feeling that he has been discriminated against, a feeling which is not without some justification. Physicians are still drafted up to age 35, although few other Americans are drafted after age 26. Doctors are the only group drafted even if they have children. They are drafted with physical handicaps which would make anyone else 4F. At the present time, the "Selective Service" is selecting virtually 100 per cent of the country's eligible physicians. This was not the case until the recent military buildup, with its resulting increased demands for physicians. It has meant that many 33- and 34-year-old physicians, who had established practices, are suddenly being drafted into the service.

The doctor-draftee sees many of the regular Army physicians desperately trying to resign from the service, in some instances specifically to avoid being sent to Vietnam. Although the Army has made every attempt to discourage this mass exodus of doctors, they have not been entirely successful, and the loss is only increasing the need to draft more civilians to take their places.

In Vietnam the positions of highest risk -taking care of combat casualties at the battalion level- are almost always assigned to draftees. Career military physicians, who presumably chose this type of life, tend to be given jobs in highly secure areas in the larger hospital installations, or purely administrative duties. Although it is certainly true that the morale of U.S. troops is generally high in Vietnam, it is considerably below average among physicians. This is not only due to the factors already mentioned, but also because physicians as a group tend to be far more alert to the political ambiguities of our presence in Vietnam.

This sort of smoldering dissatisfaction has come to an inevitable crisis with the court-martial of Captain Howard B. Levy. The conflict for Dr. Levy arose

from the fact that, unlike the medics of previous wars, whose jobs were merely to provide emergency aid to their fellow soldiers, the Special Forces medics use their medical knowledge to treat civilians.

In utilizing the medical skills with which Dr. Levy was supposed to provide him, the Special Forces medic is as much concerned with his military-political impact on his patients as he is with purely humanitarian considerations. In my own experience in Vietnam I recall one particular incident where Special Forces medics deliberately used their skills on the wives of known Viet Cong in the hopes that these women could then be persuaded to provide intelligence information which in turn would probably lead to the deaths of their husbands.

Not only was Dr. Levy asked to share his medical expertise with non-medical personnel—a direct violation of his Hippocratic oath—but he was also expected to condone the use of dangerous drugs, including narcotics, by non-professionals in a manner which no physician would allow in a civilian setting.

There are instances where such practices risk considerable harm—for instance the promiscuous distribution of anti-malarial drugs to anyone with fever. Such a practice can rapidly lead to the development of drug-resistant strains of malaria, which in turn provide a direct threat to our troops in the field.

Aside from the role of the Special Forces medic, which has been the issue in the case of Dr. Levy, other para-medical personnel in Vietnam have been called on to perform in a way which is different from that of previous wars. For instance, helicopter ambulance medics are expected to be able to operate .30-caliber machine guns while on evacuation flights. The fact that in this war it is necessary for medical personnel to be so involved in dual capacities tends to further blur the separation which medicine has in the past enjoyed in the military.

As for Special Forces medics, there is little question that their primary role is that of a combat soldier. Operating as two members of a 12-man "A" team from camps in isolated parts of Vietnam, these men take their turn with the others on combat patrols. On these patrols their job is to seek and destroy the enemy and only incidentally to take care of the medical needs of others on the patrol. In the event the camp itself comes under attack, their initial assignment is to man the mortars rather than to be prepared to care for casualties. At all times they remain under the command of non-medical personnel whose judgment always overrides decisions which might be in the best interest of the patients. This means that in certain circumstances they must abandon patients to fulfill their primary obligation as fighting men.

The Army has made an enormous miscalculation in assuming that Dr. Levy is an eccentric whose views are not shared by other physicians. In fact Dr. Levy's court-martial represents only the top of an iceberg of dissent which runs through the Medical Corps. It is my impression that the majority of draftee-physicians share his views to a greater or lesser extent and have either felt too intimidated to express them or have never been put in a position of having to make the type of ethical decision which faced Dr. Levy—only a very small percentage of physicians in the Army are ever asked to train Special Forces medics.

The Army is obviously not entirely unaware of the increasing alienation between young physicians and the military. It has also probably not escaped our military leaders that generally physicians constitute the largest group of Vietnam dissidents within the military's own ranks. However, the Army cannot do without the services of physicians, particularly in wartime. Perhaps the biggest mistake the generals have made is to assume that because they can obtain this large group of highly trained professionals in a state of involuntary servitude, they can mold them into a pattern of military conformity in the same way that they do an 18-year-old high school graduate.

All segments of the Army, except the Medical Corps, are to a greater or lesser extent committed to the primary mission—the use of force to achieve certain objectives. By mutual consent, the Medical Corps has had an implied contract allowing it to function, in many respects, outside the normal military structure. As a result physicians have been allowed a great deal of latitude, and generally a freedom of behavior and expression which would not be tolerated in other officers.

For instance, one draftee-physician I knew decided while on duty that he wanted to go to Chicago for a few days. When he returned to his post in Washington, he was informed that he had been A.W.O.L. However, he was told that because he was a physician [illegible] would be taken against him.

The indictment of Dr. Levy represents a shift from this previous position and undoubtedly reflects the Army's concern about its increasing lack of cooperation from physicians. It would have been easier for the Army to handle Dr. Levy quietly and without publicity. He was due to be discharged this month anyway, and it seemed that for both sides the most desirable course of action would have been to drop the charges and forget the incident. However, it appears that the Army felt that by making the trial an issue of national or even international importance, Dr. Levy could be used as an example to other physicians who share his views. But it now appears that the trial and its attendant publicity rather than stifling further criticism of the Army by physicians, have actually stimulated it.

The Army is feeling the effects of the strong undercurrent of dissent against the Vietnam war that exists among many American medical students and young physicians today. In May, for example, more than 250 American medical students at medical schools across the country signed a statement saying that they "refuse to serve in the Armed Forces in Vietnam." More have signed the statement since then, and of course many of the signers will be subject to jail for affirming this stand. It is surprising that this statement of protest coming from what is normally a rather conservative sector of the American populace—medical students—has not received more attention in the national press. Physicians are now uncomfortably aware of just how far the military is willing to go in telling a doctor how he can practice his profession.

Dr. Bourne, a psychiatrist, was recently discharged from the U.S. Army after three years of active duty. He spent one year in Vietnam studying the effects of stress on combat troops, working directly with Special Forces, and spent a period of three months in a Special Forces A-Team camp on the Cambodian border. In connection with his service in Vietnam, Dr. Bourne was awarded the Bronze Star, the Air Medal, and the Combat Medical Badge. He recently testified in the defense of Dr. Howard Levy.

LEE ISRAEL DOGOLOFF

PRESENT EMPLOYMENT

Deputy for Prevention, Federal Drug Management Office
Office of Management and Budget
Old Executive Office Building, Room 424
Washington, D.C. 20503
Telephone: (202) 395-4903

EDUCATION

June 1964 Masters of Social Work, Howard University

June 1961 B.A., University of Maryland

CHRONOLOGY OF RELEVANT EMPLOYMENT

1975 Present — Deputy for Prevention, Federal Drug Management Office, Office of Management and Budget

Provide staff support to the President, the Domestic Council and the Office of Management and Budget on the drug program. Have Executive Office oversight and coordination responsibilities for the prevention, treatment, and rehabilitation program throughout government and play a major role in ensuring the implementation of Federal drug policy. Since the office's responsibilities span the treatment and prevention, law enforcement and international program areas, I participate in those aspects of the program as well.

In addition to executive-level staff functions, I lead an intergovernmental effort to determine the effectiveness of treatment and was instrumental in establishing interagency workgroups on employment, prevention, and criminal justice interface. I also provide international technical assistance activities and maintain broad professional contacts within the field of drug abuse.

1974 1975 — Director, Division of Community Assistance, National Institute on Drug Abuse

As Director of the Division of Community Assistance, I supervised a staff of 60 and was responsible for a budget of $186 million. I was responsible for all Federally-funded treatment and rehabilitation programs, for the program of special formula grants provided to all Single State Agencies for Drug Abuse, and for programs relating to the criminal justice and drug abuse treatment systems. Also had the responsibility for providing all necessary management and technical assistance to these programs. Provided consultation on the developing of national policy, program management and clinical services in the countries of Thailand, Iran, Colombia and Venezuela.

From May to October 1975, I was on special assignment to the Domestic Council Drug Abuse Task Force which prepared a major policy review for the President: the White Paper on Drug Abuse. I directed the treatment study group involving 40 individuals from 15 agencies.

1972 Director, Government Assistance,
1974 Special Action Office for Drug Abuse Prevention (SAODAP)

I was responsible for developing and maintaining effective liaison with State, regional and local government levels and for assisting them in initiating and upgrading their drug abuse prevention efforts. I planned, directed, coordinated, and reviewed all Division programs, which included: direct and contracted technical assistance; assessment and developing of drug programs; training of key personnel in all phases of drug abuse program management; establishment of mechanisms to initiate consistent record and data management systems; and collaborating with other Federal officials to integrate SAODAP policy into a comprehensive Federal strategy for all executive agencies.

1970 Deputy Administrator
1972 Narcotics Treatment Administration, Washington, D.C. (NTA)

In 2-1/2 years, NTA grew from a $1.2 million program, treating 100 addicts to a $10 million program treating over 4,500 heroin addicts with a staff of 410 professionals and para-professionals.

I had charge of the full range of agency operations, including the supervision of all executive level staff; responsibility for personnel; budget management; the development and refining of treatment strategies; and the coordination and implementation of all new programs launched by NTA.

To provide adequate treatment, NTA established a computerized information system and implemented a model screening, referral and diversion program for heroin addicts in the criminal justice system. At that time, NTA was considered the national model in terms of drug treatment programs, so I was often called upon to speak before various professional groups interested in addiction; participate in national conferences; and consult with other programs throughout the country.

1969 Coordinator, Community Services,
D.C. Department of Corrections, Washington, D.C.

Worked with the Associate Director to establish and staff a network of 10 community correctional centers which provided innovative environments for the rehabilitation of offenders. As part of this effort, assisted in the implementation of a "halfway house" designed specifically to treat addict offenders. As coordinator, bore primary responsibility for achieving program objectives relating to the bureaucracy, acquiring facility sites and managing the personnel system.

PERSONAL DATA

Born October 19, 1939 (Baltimore, Maryland)
Married, two children
Reside in Silver Spring, Maryland

"Who's Who in Government", 1972
Distinguished Service Award, 1975 (Special Action Office for Drug Abuse Prevention)

CONSULTANTSHIPS

1971 - 1972 Center for Human Services, Washington, D.C.

1971 - 1972 Rehabilitation Counseling Program, George Washington University, Washington, D.C.

SOCIETIES

American Society for Public Administration
National Association of Social Workers
Academy of Certified Social Workers

FACULTY APPOINTMENTS

1970 - 1972 Instructor, Center for the Administration of Justice American University, Washington, D.C.

1966 - 1967 and 1969 - 1970 Instructor, University College University of Maryland College Park, Maryland

1966 Field Work Supervisor for Graduate School of Social Work, Howard University, Washington, D.C.

PUBLICATIONS

Dogoloff, Lee I., "Methadone Maintenance and Control Models". Paper presented to the Department of Health, Education, and Welfare, Region IV. Rehabilitation Institute on Drug Abuse, May 1971.

Dogoloff, Lee I., and Mary Louise Gumpper, "Treatment of Heroin Addiction and the Criminal Justice System: Are They Compatible?" Corrective Psychiatry and Journal of Social Therapy, July 1973.

Dogoloff, Lee I., "Relinquishing Federal Control of Drug Abuse Prevention". Report to the International Conference on Alcoholism and Drug Abuse, November 1973.

Dogoloff, Lee I., "Priorities and Plans for Services to the Drug Dependent". Proceedings of the First National Conference on Drug Abuse, 1976.

Dogoloff, Lee I., "The U.S.A. Experience with National Management of Government-Sponsored Rehabilitation Programs". Report to the Thirty-First Congress on Alcoholism and the Addictions, 1975.

Dogoloff, Lee I., and Mary Louise Gumpper, "State and Local Relationships: The Role of the Single State Agency for Drug Abuse", Rehabilitation and Treatment Aspects of Drug Dependence, CRC Press (pending publication).

Dogoloff, Lee I., "Federal Perspectives on Drug Abuse". Proceedings of the Third National Conference on Drug Abuse (pending publication).

Dogoloff, Lee I., and Mary Louise Dogoloff, "An Evaluation of the Federal Drug Abuse Policy: One Perspective", Rehabilitation and Treatment Aspects of Drug Dependence, CRC Press (pending publication).

Dogoloff, Lee I., "Cross Cultural Aspects of Drug Abuse." Proceedings of the Twenty-fifth Iranian Medical Congress, 1976.

The CHAIRMAN. We welcome you to this nomination hearing, and offer you the forum, Dr. Bourne, for any statement you would like to make.

STATEMENT OF DR. PETER G. BOURNE, NOMINEE TO BE DIRECTOR OF THE OFFICE OF DRUG ABUSE POLICY

Dr. BOURNE. Mr. Chairman and members of the committee, I am very happy to appear before you today.

In the last 5 years we have made considerable progress in the field of drug abuse. In 1971 it was almost impossible for a heroin addict to obtain treatment. Now we have 247,000 addicts in community-based programs, nearly half of which are funded by the Federal Government. The other half are State and local programs, many following Federal guidance and drawing on Federal research and expertise.

We have made progress in supply reduction efforts as well. We have successful broken the "French Connection" and concluded diplomatic agreements with Turkey, eliminating that country as a source of illicit supply. In addition, the Drug Enforcement Administration has achieved an outstanding record in disrupting major trafficking networks.

We still, however, have a long way to go. The drug problem is complex, fluid, and changeable. Although nearly a quarter of a million addicts are now receiving treatment, there are more heroin addicts in our country today than ever before. And while Turkey is no longer a source, Mexico now supplies most of the heroin reaching our streets. In addition, Burma, Thailand, Afghanistan, and Pakistan are potential sources of heroin for the American market.

I believe that we have the potential to control this complex problem. However, we need a single policy unit to insure that our diplomatic initiatives, our treatment and prevention, and our drug enforcement efforts are all geared to a single set of goals and policies.

We need to coordinate our Federal activities, which are scattered through over 20 departments and agencies. We need to respond quickly and efficiently to the subtle, and frequently rapid, changes in the drug-abuse situation.

I believe that the Office of Drug Abuse Policy, as envisioned by the Congress, is the most effective mechanism for accomplishing that coordination, responsiveness, and efficiency. The Office can also play a crucial role in the President's overall Federal reorganization plan, eliminating duplication among the Federal agencies, and bringing important support and visibility to the drug-abuse field.

I hope that the initiation of ODAP will begin a new era of close cooperation with the Congress, and believe that we have already made significant progress in that direction. It is possible to reduce the costs of drug abuse in this country—the human suffering, the rising crime rates, the strain on our criminal justice system. But to do so—we must all work together—overseas with other nations, at home with State and local governments, with all the Federal agencies, and with the Congress.

I would be happy to answer any questions.

The CHAIRMAN. Thank you, Dr. Bourne.

Excuse me, Senator Hatch, I should have asked if you had any words of observation or wisdom for us at the beginning of this hearing.

Senator HATCH. Thank you for your courtesy. I have nothing now.

The CHAIRMAN. Your observation and wisdom will come later.

I think we might as well proceed with the two of you together. I forgot to note that the committee has received very warm endorsements of your nominations, including statements that came in your support from leading organizations in the field of drug abuse, which combined represent the full spectrum of interests, both public and private, in the area of drug-abuse prevention and control.

They are not all here, the individuals speaking for the institutions and organizations, but their statements will be included in the record.

They were nearly all favorable, and positive, and all helpful to us. Because of the time constraints, we felt with the time available to us, maybe if there were any persons that had some observations or disagreement with some aspects of your professional lives, that we would give them the chance to be heard.

Now, Mr. Dogoloff.

STATEMENT OF LEE ISRAEL DOGOLOFF, NOMINEE TO BE DEPUTY DIRECTOR OF THE OFFICE OF DRUG ABUSE POLICY

Mr. DOGOLOFF. Mr. Chairman and members of the committee, I am pleased to appear before you today to discuss my nomination to the position of Deputy Director of the Office of Drug Abuse Policy.

My career began as a social worker, and I worked in a variety of social service settings, providing counseling to welfare recipients, prisoners, the mentally ill, and families in conflict.

Later I assumed primary responsibility for managing the Washington, D.C., drug abuse treatment and rehabilitation program, an experience which led me into Federal service at the Special Action Office for Drug Abuse Prevention and its successor agency, the National Institute on Drug Abuse.

During these years my chief concern was to meet the service needs of people. As a former counselor and local program administrator, I have firsthand knowledge of both the benefits and frustrations associated with Federal funding requirements and bureaucratic redtape.

While at the Special Action Office and the National Institute on Drug Abuse I never forgot my years as a service provider. Consequently, my objective as a Federal treatment and rehabilitation manager and policy maker was to propose initiatives which were sensitive to issues at the State and local level and which were reasonable and viable given field conditions.

I still believe this concern for field-responsive policy is critical. However, my work at the Office of Management and Budget has broadened my conception of the drug abuse field to include domestic law enforcement and international activities, and has given me an appreciation of how complex and diverse our Federal drug program really is.

With activities that range from crop substitution in Northern Thailand, to interrupting sophisticated international drug trafficking

networks, providing treatment services, regulating licit drug production, and supporting critical pharmacological and applied research, the Federal effort involves most Cabinet offices in the Government, and over 20 separate Government agencies.

The three major components: International activities, law enforcement; and treatment, prevention and research have each developed to the point where the unique perspective provided by Executive Office oversight, coordination, and policy formulation is critical.

The wisdom and foresight of the Congress in establishing this Office, and of President Carter in implementing it, is to be applauded.

Words like "oversight," "coordination," and "policy formulation" must be translated into actions to effectively address the problem of drug abuse. Questions to be studied might include—what regulatory changes can be made to reduce the abuse of barbiturates and amphetamines; what kinds of legal sanctions will be most effective in successfully apprehending, prosecuting and immobilizing drug traffickers; how can knowledge about the causes and most effective responses to drug abuse be increased and quickly conveyed to the field.

Basic organizational and management issues also must be explored to determine if changes in Government organization and possible consolidation of functions might increase effectiveness. We must find ways to avoid duplication of effort and increase cooperation among various agencies.

We must determine if joint research activities in such related areas as drug abuse and alcoholism are feasible.

In our service programs, we should address such issues as the simplification of Federal reporting requirements for State agencies and local treatment centers that have responsibility for both drug abuse and alcoholism.

These and other questions must be thoughtfully studied, using the best available talent within the Government and from the outside.

I intend to pursue a policy of open cooperation and frequent consultation with the Congress and professionals from all levels of Government and the private sector.

The Office of Drug Abuse Policy must maintain a clear understanding of its mission—to develop and analyze key issues, to formulate appropriate policies, and last, to assure that such policies are adequately implemented.

This must and can be accomplished against a backdrop of concern for people—people who are daily putting their lives on the line to stop drug trafficking—people who are providing treatment and prevention services—people who are suffering the debilitating and sometimes deadly affects of drug abuse—people who are working very hard at all levels of Government and in the Congress to address this problem.

I will be happy to answer any questions you may have.

The CHAIRMAN. Thank you very much, Mr. Dogoloff.

Senator Hathaway, by the way, chairman of our Subcommittee on Alcoholism and Drug Abuse, is at the White House this morning. He has a prepared statement which I will place in the record at this point.

OPENING STATEMENT OF HON. WILLIAM D. HATHAWAY, A U.S. SENATOR FROM THE STATE OF MAINE

Senator HATHAWAY. The purpose of this hearing of the Committee on Human Resources is to consider the nominations of Dr. Peter Bourne and Lee I. Dogoloff to be Director and Deputy Director respectively, of the Office of Drug Abuse Policy.

The Office of Drug Abuse Policy was created by Congress last year in the course of amending the Drug Abuse Office and Treatment Act of 1972. It was designed by Congress to be a successor to the Special Action Office for Drug Abuse Policy, which was originally created by that act, and which expired at the end of 1975. However, there are significant differences between the old and new offices.

The Special Action Office had both policy planning and programmatic authority. It administered Federal programs involving drug abuse treatment, prevention, and research. It also had a certain amount of authority to participate directly in the decisionmaking process of other Federal agencies involved in drug abuse policy.

Upon the expiration of the Special Action Office, its programmatic functions were all transferred to other agencies—primarily the National Institute of Drug Abuse in the Department of Health, Education, and Welfare. However, many Members of Congress still felt that a void existed in drug abuse policy planning and coordination at the highest levels of government. This was true primarily because of the unique variety of forces at work in the field of drug abuse prevention—forces which involved law enforcement as well as health—and international policies as well as domestic.

Administrative responsibility for drug abuse was thus spread across several departments and agencies of the Government. Each possess completely separate and coequal avenues of administrative and statutory authority, all leading directly to the President and the Congress.

With each of those departments and agencies pursuing their separate drug abuse policy agendas, it was clear to us that a void existed in the coordination of those policies into a coherent national drug abuse policy.

As a result, Congress created a policy planning and coordination office to fill that void—the Office of Drug Abuse Policy.

I would like to commend President Carter for agreeing to establish this office. We realize that this decision ran counter to his specifically announced policies regarding Government organization—to cut back on the proliferation of Government agencies and offices wherever possible. It thus represents a particular recognition on his part of the seriousness of the drug abuse problems faced by this country, and of the need for better coordination of Federal drug abuse efforts.

The CHAIRMAN. I have many questions for both of you. I would like to submit most of them as written questions for your answers. These are basic to the concerns that we have. We want to have a record that is more fulsome in a sense, and the written response will give you a better opportunity to amplify and structure policy as you see it.

There are just a couple that I would like to handle here at the hearing. The rest, of course, will be part of the record.

The committee has received testimony in opposition to your nomination, Dr. Bourne, because of your known position in favor of decriminalization of marihuana.

I wonder if you could clarify your position for us.

Do you also favor relaxing laws on such drugs as heroin and cocaine? Just what are the criminal aspects and policy of law which you see applied in this area?

Dr. BOURNE. I believe drug laws should be used in such a way that they tend to discourage the utilization of all drugs. I believe that those laws should be used in such a way that respect is maintained for the law, and also in such a way that the punitive aspects of the law are not more damaging to the individual than the drug that we are trying to discourage.

I believe that it is appropriate for the Federal Government to leave up to the individual States the decision as to how they wish to handle the laws relating to the utilization of various drugs, including marihuana.

I believe that simple possession for personal use of marihuana should be decriminalized at the Federal level, the Federal laws should be decriminalized for small amounts that are clearly for personal use. Criminal penalties should be maintained for trafficking at the Federal level, and hopefully would also be maintained at the State level as well.

But we feel that the damage, the medical damage demonstrated at this point as being caused by use of marihuana in the quantities in which it is currently being used in this country, does not warrant makiing it a criminal offense for simple possession.

I do not believe that we should move toward decriminalization of other drugs. I think the evidence with marihuana, the situation with marihuana, is quite different from other drugs. Perhaps one reason, apart from the medical aspect, is that marihuana can be grown throughout this country. Despite very intensive efforts to control it over several years, it is clear that we are completely incapable of doing that.

This is not the case with drugs like heroin, which have to come from outside the United States, where it appears we have a reasonable chance of controlling the drug at the source.

I do not see any reason at this time to consider decriminalizing other drugs.

The CHAIRMAN. Thank you very much for your statement. We appreciate it.

Another area in which there has been expressed some concern is your position on controls of barbiturates.

Would you ban the prescribing of all three classes of barbiturates?

Dr. BOURNE. No; I had raised the issue of the misuse of barbiturates in society. Next to heroin, barbiturates cause the largest number of deaths from drugs, apart from tobacco and alcohol.

I think if our drug policy is based on reducing the mortality and morbidity resulting from drugs, from drug abuse, then we have to look at ways of making those drugs less available.

I think that we do potentially have a handle on the barbiturates, they are under Federal control, and I think it is our responsibility to

look at whether it would be appropriate to restrict the availability of certain classes of barbiturates.

We are in the process now of initiating an extensive study to look at what the impact would be on medical practice, on the economic aspects of the commercial production of these drugs, and on the reduction in abuse, and hopefully overdose deaths from these drugs.

It is clear that there are certain medical conditions, including epilepsy, where the availability of certain classes of barbiturates would have to be maintained. There is no substitute for those drugs in certain circumstances.

However, it is clear that in other areas there are now safer, and probably more effective drugs than barbiturates, particularly for the short acting barbiturates, and I think that we do want to look very carefully at whether it continues to make sense to have those drugs widely available in society, when perhaps medical science has moved sufficiently further forward that we have satisfactory substitutes for them.

The CHAIRMAN. All classes are prescription drugs, are they not?

Dr. BOURNE. Yes; they are. But we will be careful and selective in any decision that is made that would restrict the availability of those drugs.

The CHAIRMAN. What would be the administrative or legislative processes to deal with this in terms of restricting barbiturates?

Dr. BOURNE. There are two options. It could be done through regulatory channels, through FDA, or by new legislation.

We are currently examining a whole series of options. One option might even just be to make it a public admonition from our Office, or from the President to say that these drugs are dangerous, that their prescribing should be looked upon with great caution, and perhaps have no regulation or change in the law.

We will be looking at the whole range of options, and look at what makes sense in terms of what the payoff would be in terms of reducing the mortality, morbidity from these drugs.

The CHAIRMAN. But this would be the initiative, and consideration would be out of your agency?

Dr. BOURNE. Yes. I think the initiation of it would be. We have already met with representatives of all the key agencies involved, including the FDA, DEA, NIDA, representatives from the Institute of Medicine, who are willing to do a study for us, an independent study on this issue.

The policy would be formulated in conjunction with all the agencies that would be involved. It will be a fairly careful, detailed process in which everybody in the Federal Government who has had a vested interest in this area would have an opportunity to have their views aired, and to raise any concerns that they might have about either the basic decision or its implementation.

The CHAIRMAN. Concerning dependence and addiction to barbiturates, and to the other drugs you mentioned, heroin, cocaine, marihuana, is there a common pattern in this business of becoming addicted?

Dr. BOURNE. There really is not a common pattern at all. With heroin, because of its very high addicting, physically addicting, po-

tential, people begin to use the drug, and a relatively high percentage of those people go on to addiction.

It is in many instances not particularly related to psychopathology or predisposing personality factors. A person, just because of his regular use of heroin, will become physically addicted, and then have a very serious problem with it.

Our indication is with other drugs, such as barbiturates, other tranquilizing drugs, people can use those drugs without becoming addicted if they use them occasionally, or irregularly, and those that get into serious difficulty with those drugs are more likely to have predisposing emotional problems.

Some data, from previous studies by the National Institute on Drug Abuse, suggests that approximately 5 percent of the people who use barbiturates develop some kind of dependency problem with them, and very often that is in combination with excessive use of alcohol.

With drugs like cocaine and marihuana, there is not a physically addicting component. Those drugs do not cause physical addiction. So reliance, and heavy excessive chronic use of those drugs is related exclusively to psychological habituation. We do not know exactly what percentage of those people who use those drugs becomes dependent, but it appears to be well below 5 percent.

The CHAIRMAN. The only one that you mentioned that is a physical demand or addiction is heroin?

Dr. BOURNE. Barbiturates also cause physical dependence. But the manner in which they are used does not seem to result in quite as high a percentage, or anything like as high a percentage of people becoming physically addicted, as is the case with heroin.

Once a person is addicted, it is relatively hard to get them detoxified.

The CHAIRMAN. An earlier statement was made that heroin addicts numbered—I believe Senator Nunn mentioned the figure—about 600,000?

Dr. BOURNE. This is always a difficult figure to come up with.

The CHAIRMAN. I do not want to be definitive on that. I just wanted to observe that in another area of addiction, alcoholism, the figure that is commonly used, loosely perhaps, is in the millions—9, 10, 11 million people.

What was the number of addicts who are subject to drug addiction? What broad number do you work with?

Dr. BOURNE. I think it varies according to how you define the issue of drug abuse. We have, at one extreme, the figure of 35 million as the number of people who have used marihuana. We have around 10 million as the number who use marihuana on a regular basis. We estimate there may be as many as 2 million people in this country who have used heroin at some time or another.

There are probably around a half million people currently either in treatment, or using heroin on the streets.

We know that as many as 26 percent of the population have used barbiturates or tranquilizers, other psychoactive drugs during the last 30 days, but only a small percentage of those people have a dependency problem.

So I think we are talking probably somewhere in the region of 10 million people who use some kind of psychoactive substance on a regular basis if you include marihuana.

The CHAIRMAN. That does not quite describe the comparable situation—what is described as alcoholism?

Dr. BOURNE. No. The 10 million people for alcoholism are people who have had problems with alcohol. The 10 million people who use marihuana regularly, those are people who use it, and their main problem is they are breaking the law. It is not necessarily a reflection of whether they have problems with the drug or not.

The CHAIRMAN. Of course, if alcohol—and the disease of alcoholism leads inexorably on to death due to alcohol, that is not the case for marihuana and some of these other drugs, I would suggest, is that right?

Dr. BOURNE. I am not aware of really any case of anybody dying from marihuana. Obviously, a significant number of people die each year from barbiturates, a couple of thousand die from heroin, and several hundred others die from a variety of other lesser known drugs.

The CHAIRMAN. And alcohol?

Dr. BOURNE. The figures are not terribly solid, because once people die from alcohol, the actual terminal cause of death may be something else, such as heart failure. It may be directly caused by the alcohol, but death certificates will not show that, but we are talking about tens of thousands of people who die as a result of alcohol every year. It is a many fold increase over the number who die from other drugs.

The CHAIRMAN. It is many fold?

Dr. BOURNE. Yes.

The CHAIRMAN. That leads me to really the final question.

There is a significant difference in resources that are applied to cure and prevention in the two areas, drugs and alcohol. As a matter of fact, twice the Federal resources go to the drug problem as go to alcohol.

I just wondered if you have any feeling about this, whether we should be doing more in one, or less in the other, or how your broad attitude is?

What is your broad attitude in this area?

Dr. BOURNE. I think it is a concern to all of us who are involved in this field, that there is this obvious inconsistency in terms of allocating our resources. The problem of alcohol is clearly the No. 1 drug problem in the country, and yet because of the historical happenstance of it being a legal drug that is incorporated into our culture in a very integrated way, we treat it differently from other drugs. I do not think there is any question that most of us in this field feel there is ample room to increase resources for treatment of alcoholism.

I would not like us to get into the situation of seeing it as an either or situation. I think we need the resources to treat the problem of drug abuse. I think that we, fortunately, because of the attention that drug abuse has gotten, because of the direct linkage with crime, have seen a considerable amount of money and interest put in that area.

I hope that we can see an appropriate increase in the resources for alcoholism, but I hope this would not be at the expense of the program for drug abuse, which seems to be doing fairly well at the present time.

The CHAIRMAN. A number of States have adopted the uniform act, which, in part, decriminalizes public drunkenness. Well, just this Monday, I was in New Jersey, and we reached our effective date of the uniform act.

Last week someone who was apprehended for public drunkenness went to the jail house, and this week, and hereafter they will be taken to a detoxification center.

Medical facilities, of course, now know that they have a significant new responsibility, and are not fully geared. I know there will be additional costs upon the medical facilities. These are areas, though, that indicate to me that we are moving in the right direction in reaching people with a disease, and doing it with, first, decriminalizing, and then making treatment available in the first instance, and then a recovery program, and it will require more than we have done. At least if the State that I have the honor to represent, is any indication of our need, we are not reaching it with resources.

I wanted to register that, and the other questions which I have for you I will present to you in writing.

Just before I turn this over to Senator Hatch, you people are in the same office, and have the same area of responsibility. Do you have any observation on anything that has been mentioned with Dr. Bourne, Mr. Dogoloff?

Mr. DOGOLOFF. Dr. Bourne and I have discussed many of these issues, and we are in accord, in agreement. But I would be happy to comment on anything specifically that you would like.

The CHAIRMAN. I have some questions that will be submitted in writing.

By the way, it would help us all if you could, during part of this weekend, work these up so we can have them back by Monday night. Then we can report your nominations for deliberation in the Senate.

Senator Hatch.

Senator HATCH. We are happy to welcome both of you here today.

I do have some questions.

Dr. Bourne, several years ago, before the creation of NIDA, and NIAAA, Government responsibilities for alcoholism and drug abuse were lodged with NIMH. With the formation of the National Institute on Drug Abuse, and the National Institute on Alcohol Abuse and Alcoholism, sister agencies at NIMH, was recognition that for the significance of these problems in their own right, the need for greater visibility and attention.

Recently there have been discussions regarding the merits of again combining these concerns, either under Mental Health, or apart from Mental Health.

Now, are you in favor of maintaining present Federal agencies for alcoholism and drug abuse, or should both problems be addressed by a single agency, or should they be assumed, as they once were, under NIMH?

Dr. BOURNE. I do not favor putting them back under NIMH. At the present time I favor keeping the two separate substance abuse agencies, NIAAA and NIDA, I think we should examine the possibility of combining certain aspects of their operations.

One area that I think particularly wants looking at is the intramural research programs. The National Institute on Drug Abuse has a research program in Lexington, Ky., at the Federal detention facility there. NIAAA has an intramural research program based at St. Elizabeths Hospital in Washington.

The scientists who do basic research in drug abuse and alcoholism are very often the same people, whose fields are very closely linked.

I think perhaps it makes a great deal of sense in looking at the possibility of establishing a single research center for substance abuse here in Washington, perhaps on the campus of the National Institutes of Health.

I do not favor combining at the present time the service aspects of those two programs.

I think there is still enough concern that those programs maintain their separate identity and integrity at the treatment level. I think there is room perhaps for some demonstration programs that would combine the treatment of alcoholism and drug abuse, particularly where you have patients who have both problems.

But I think organizationally we are not ready to combine the service aspects of those two Institutes.

Senator HATCH. Regardless of how the administration is set up, are the appropriations proposed for alcoholism and drug abuse in the administration budget, essentially the same as the current expenditures, sufficient in light of inflation and growing need for prevention, treatment, research and manpower training?

Dr. BOURNE. I think at the present time as far as drug abuse is concerned, while there may be certain areas where some increased funding might be appropriate, we are generally fairly close to an appropriate level.

I share some of the concerns that Senator Williams raised about the field of alcoholism. I think we have taken a quite different approach to alcoholism from that which we have taken with drug abuse. With drug abuse the Federal Government has taken on the responsibility to saying we will try to insure that every drug addict in the country has access to treatment. Either the Federal Government will provide that treatment, or the State and local government will do so.

We have never done that with alcoholism.

Senator HATCH. Do you think that should be done with alcoholism?

Dr. BOURNE. The cost for the Federal Government to do that would be inordinate, we are talking, Senator Williams mentioned, about 10 million people—I do not think the Federal Government can directly provide treatment for 10 million people. But I think that we need to move probably to doing substantially more than we are doing right now, to provide adequate treatment of alcoholics.

I think we have perhaps fallen substantially short in terms of trying to provide money for the States to treat alcoholics, and to provide adequate treatment, outside of just demonstration projects.

Senator HATCH. Some of the witnesses who have testified before our Alcoholism and Drug Abuse Subcommittee have indicated that alcoholism in this country is of epidemic proportions, and that the youth of our society, a high percentage of them, are experimenting with alcohol, early in their lives, as well as with these other drugs.

A variety of other drugs, amphetamines, marihuana, cocaine, heroin.

Dr. BOURNE. I share that view, and I have the same concern about it.

Senator HATCH. I see.

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With regard to decriminalization of marihuana, you have indicated you favor decriminalization of marihuana?

Dr. BOURNE. Yes. Let me just restate that. I favor decriminalization of the Federal law. I favor decriminalization for the possession of small amounts of marihuana for personal use. I do not favor decriminalization for trafficking, and I feel that the option should be left up to the States as far as the State law is concerned.

Senator HATCH. You would allow the States, under your approach to this, to enact criminal State laws——

Dr. BOURNE. If they wished to, yes.

Senator HATCH. Let me just ask you this.

With regard to decriminalization on the Federal level, but not for traffickers, would that include, say, young people, who have some of it and sell it to others, but who were not really known traffickers?

Would you categorize them as traffickers?

Dr. BOURNE. Unfortunately, there is no way to say absolutely who is a trafficker and who is not, so one has to make some arbitrary cutoff point.

That has been done in the past—there are a number of pieces of legislation pending in Congress now, which use an arbitrary cutoff point, usually possession of an ounce or more.

If you have an ounce or more, it is presumed you are in the process of trafficking, and if you have less than an ounce, it is presumed it is for personal use.

Senator HATCH. Would you continue to apply that same——

Dr. BOURNE. Yes.

Senator HATCH. If a 16-year-old had an ounce or more on him, even though he was not trying to sell it or transfer it, if he is caught, he could be busted, in youth terminology, and be given a record?

Dr. BOURNE. Yes. He would have a record, and whether he was put in prison would still obviously be up to the judge. But the judge would have that option.

Senator HATCH. When you are talking about decriminalization, it is not as wide a situation as some people had thought you were advocating?

Dr. BOURNE. No.

Mr. DOGOLOFF. I think it is also important to recognize that we are talking about the Federal statute only. The activities involving individual apprehension and prosecution for small amounts of drugs generally is much more appropriate as a State and local law enforcement function, whereas Federal law enforcement resources can best be utilized to interdict trafficking, to develop intelligence, to concentrate on interstate trafficking of drugs.

I think it would probably be a poor use of Federal resources if we were to concentrate our efforts on the street level users of any drugs, but that does not mean we are encouraging the use.

Senator HATCH. You mean of any drug, including cocaine, marihuana, other serious drugs?

Mr. DOGOLOFF. In terms of an individual who is using those drugs, it is much more appropriate for State and local criminal justice officials to apprehend and prosecute.

At the Federal level, in looking at the division of appropriate responsibilities, we should be looking at large shipments. We should be

looking at border interdiction, international issues; those are things that the State and locals cannot do, and to the extent that the Federal resources concentrate on street level users of drugs, those resources then get taken away from the bigger issues.

Senator HATCH. Might I interrupt here?

I think the reason that Federal sources concentrate on street usage of drugs is to ultimately lead to the larger sources of drugs so you would not bar them from doing that?

Mr. DOGOLOFF. That is a different issue.

If we are going to develop a conspiracy case as the way of getting into the trafficking network, that, of course, is very appropriate.

Dr. BOURNE. We are talking about an administrative decision.

If you have limited resources, you do not spend all of your time dealing with the street dealers. You go out with the major international traffic——

Senator HATCH. You would leave the street dealers for the States to take care of?

Dr. BOURNE. Primarily.

Senator HATCH. Both of you appear to be advocating it will be left up to the States whether or not they have tough drug laws for users?

Dr. BOURNE. Yes.

Mr. DOGOLOFF. Absolutely.

Senator HATCH. When you say "decriminalization of marijuana for personal use," you are advocating, Dr. Bourne, that you would still have some sort of civil penalty or fine which would be somewhat prohibitive to them and discouraging to the users of drugs.

Would that be so in the case of marihuana, amphetamines, and any type of drug, including heavy drugs?

Dr. BOURNE. We are talking only about marihuana.

Senator HATCH. Only about marihuana?

Dr. BOURNE. Yes, it would be a fine. It would be something comparable to a traffic offense.

We do not put people immediately in prison for breaking the speed limit. But the fact that you are apprehended, there is a fine, does tend to discourage people from going over the speed limit.

Senator HATCH. You have indicated the fine, when you and I chatted earlier, would be somewhere around $100 a pickup, is that correct?

Dr. BOURNE. We are not proposing any specific legislation at this time. There are a number of pieces of legislation before the Congress.

Most of those are quite acceptable to us. There are slight variations, but I think we are more concerned about the principle than about specific details.

Senator HATCH. What about decriminalization of cocaine on the same theory that you are advocating here?

Dr. BOURNE. Well, I do not see those two drugs in the same category.

Senator HATCH. I understand. That is why I brought the question up.

Dr. BOURNE. I think perhaps one of the major distinctions, as I mentioned previously, is that marihuana grows all over this country. It is very clear that we have virtually no way of controlling its use or its internal distribution.

Anybody who wants to use marihuana can grow it in their backyard.

Cocaine comes exclusively from outside of this country. It is brought into this country by major trafficking networks, people who are making vast amounts of money out of the drug.

I think we do have effective mechanism for discouraging its use in a whole variety of ways. I do not think it is at all comparable to the situation with marihuana.

Senator HATCH. So you would not decriminalize, in the sense you are speaking of marihuana, cocaine?

Dr. BOURNE. No.

Senator HATCH. That was "No"?

Dr. BOURNE. Yes.

Senator HATCH. What about with regard to repeated use by youthful offenders?

Let us say we have young people who are somehow or other—and we all have some tendency to understand the "somehow or other"—they raise additional funds to be able to continue the use of marihuana.

What about repeated users, would you advocate any criminal penalties or sanctions for those repeated users who generally develop into bigger users of other drugs, or at least I think they do? Maybe you do not.

Dr. BOURNE. I would be willing to consider again using the traffic violation model, that if somebody was repeatedly found in possession and was apprehended repeatedly, that at some point some kind of criminal sanction would be taken against them.

I think we do this with automobile violators. You have to break the law a number of times. But eventually you can be put in prison for breaking traffic laws.

I think if somebody is clearly a chronic repetitive user, who is repeatedly caught, then I think perhaps we should consider some criminal sanctions at that point.

In practice, I do not think that that is going to have a great deal of significance. I gather that recent studies in California show that a number of repeaters is just minimal. I do not see this as terribly——

Senator HATCH. If there is a problem, or if it is a repetitive situation, you would not mind seeing laws that provide criminal sanctions for young people who continually use the drugs, marihuana, in this case?

Dr. BOURNE. In that instance, I do not want to make my acquiescence to that too global, I think it would depend on the details of the law, how many times the person was arrested——

Senator HATCH. I agree.

Somebody has to formulate the law. You would not be against a law which would provide criminal sanctions for repetitive use?

Dr. BOURNE. I would not, provided the sanctions were not too destructive to the person and provided that—I would not support it, for instance, for a second offense, but perhaps for repeated offenses, if we reached a point where it was clear this person had some intractable problem——

Senator HATCH. Or was repetitively ignoring the law?

Dr. BOURNE. Yes; I would be willing to consider that.

Senator HATCH. As I understand it, there is in the medical profession a real problem with addicted physicians.

The AMA has proposed a model bill to get tough with these doctors and require they seek treatment.

How do you feel about the problem and the AMA approach?

Dr. BOURNE. This is a problem I have been interested in for some time. Both physicians who are addicted and the physicians who violate our laws, and make drugs available to our young people and to other drug abusers.

In the past, it has been the practice of the medical profession to hide those who had drug problems, to act as though they were doing them a favor by not forcing them to face up to the fact that they themselves were addicted.

I think that that day has gone. I think there has been a dramatic change in the medical profession. I think there is considerable awareness on the part of the AMA, and they have, in fact, established committees to deal with this particular issue, to educate the physician to the need to get treatment, to make their approach more accepting, providing treatment and help and not stigmatizing physicians who become addicted.

I would strongly support measures that would encourage physicians to get treatment, that would help to identify physicians who have addiction problems.

I also feel we need to take perhaps tougher measures against physicians who are involved, in effect, in trafficking in drugs. I feel it is a violation of the responsibility that physicians have if they are willing to get into making money and profit out of writing prescriptions for people they know to be abusers.

I think that is the worst kind of trafficking because it is violating a specific trust that these people have.

I think we perhaps have not been tough enough in the past on physicians.

Senator HATCH. That is very interesting.

Now, Dr. Bourne, you were quoted as praising the recent League of Cities' discussion of decriminalization of heroin with the possible development of heroin maintenance centers.

Do you still hold this view?

Dr. BOURNE. One of the problems I think we have traditionally had in our field is to make judgments, make decisions based on emotional knee-jerk reactions.

One of the things I hope our office could do is to be open to any new ideas or suggestions or approaches, to examine them all in an impartial light, to view them objectively, and to decide on a completely impartial basis what lends some possibly useful approach to dealing with the problem and what does not.

The use of heroin maintenance for treatment of heroin addiction has been used widely in Great Britain. It has never been even discussed here because there has always been an immediate reaction that this was a completely taboo subject.

I think there are serious problems with even considering heroin maintenance. I think the people proposing it do not understand some of the fundamental issues involved.

However, I feel that that is an important issue that should be raised, should be discussed, and it should be laid out as to what the deficiencies are.

If it does offer some help or hope, then we should discuss that and discuss the positive aspects of it, too.

That is all I was saying with regard to the National League of Cities' proposal.

Senator HATCH. High Times magazine described a meeting between you, National NORML Director Keith Stroup, and New York State NORML Director Frank Fioramonti, last summer, in which, they state, you discussed the formation of a White House Conference on Youth and Drugs under the auspices of yourself and NORML.

Is this true?

Dr. BOURNE. I went to Mr. Stroup's hotel room in New York City to give him a ticket to the Democratic Convention. He was in the hotel room with a reporter from High Times magazine.

I do not recall a discussion of anything else other than my giving him a ticket to the convention.

Senator HATCH. Mathea Falco, leading staff member of the Cabinet-level Committee on Narcotics Abuse, with whom you were associated at the United Nations' Narcotics Commission meeting in Geneva during the past several months is listed by NORML as an Advisory Board member.

Do you intend to employ her at the Office of Drug Abuse Policy?

Dr. BOURNE. Ms. Falco is currently employed by the State Department. She is senior adviser to Secretary Vance on narcotics matters.

She, along with Dr. Robert Du Pont and Dr. Peter Bensinger, are the key players in the development of Federal drug policy. It is not an issue, or it is not our responsibility, to employ her or to relate to her other than in her role as an employee in the State Department.

Senator HATCH. You do not anticipate employing her as a staff member——

Dr. BOURNE. No.

I understand she has resigned from NORML.

Senator HATCH. Dr. Bourne, as a physician and also as someone who has had experience in psychiatry, do you consider yourself a psychiatrist?

I do not know.

Dr. BOURNE. Yes.

Senator HATCH. As a psychiatrist, what effect do you think marihuana—and let us limit it to marihuana—has had on the breakdown of the family structure in America?

Dr. BOURNE. I do not think it probably has had any. I think there are very large powerful forces in our society that are changing that traditional family structure.

I think widespread use of marihuana is more a product of that than a cause of that.

Senator HATCH. You have to admit it would be an aggravation, if not the cause, it would certainly have to be an aggravation or would it not?

Dr. BOURNE. I do not know that even that necessarily is true except in the sense that it maybe has produced or inflamed alienation between different generations. I am not sure that excessive use of alcohol has not done the same thing.

I think the increase in illegitimate pregnancies has done the same thing, teenage pregnancies. I think there are a whole series of societal problems that are more the result of the breakdown of the family than the cause of it.

Senator HATCH. I have a question that I would like to ask, and we are running out of time. I have all kinds of questions in this area, and I would really like to ask you these questions, but it is my understanding we have to be out of here by 11.

I will ask this.

In your statement you mentioned Burma, Thailand, Afghanistan, Pakistan as potential sources of heroin for the American market.

What about Red China?

Would that be a potential source?

Dr. BOURNE. There is absolutely no evidence whatsoever that the Peoples Republic of China is involved in the international narcotics traffic. And this issue has been raised many times, all sources in our intelligence community and other sources have consistently come up with a negative response to that possibility.

Senator HATCH. As a physician and psychiatrist who has worked with a number of people in this area, and as somebody who has been concerned, have you ever experimented with drugs or used marihuana?

Dr. BOURNE. When I was in Vietnam more than 10 years ago, I tried marihuana, I tried it together with some friends there. I have not been a regular or chronic user of marihuana or other drugs.

Senator HATCH. Only in your youthful days in Vietnam, and you have not used any of the other drugs?

I have not meant to embarrass you. I wondered whether you used marihuana or whether you feel it is really basically not a very serious drug in its usage in America——

Dr. BOURNE. I would hardly regard myself as an expert based on my own personal experience, and I would have to rely much more on the extensive studies that have been done by the National Institute on Drug Abuse.

They have supplied each year to the Secretary of HEW a report on marihuana and health for the last 5 years in which they have pooled together studies that have been conducted throughout the world on the relationship between marihuana and health.

And it appears that in the levels that marihuana is used in this country, that it does not result in any deaths which we are able to determine, or any significant number of health problems.

Senator HATCH. As a psychiatrist and as a physician, has any material been brought to your attention that would indicate that physical or psychological damage can or may result as a result of regular usage of marihuana?

Dr. BOURNE. There are problems with any drug when somebody relies on it regularly. This is quite distinct from issues like brain damage or effect on their immune system, or the effect on their endocrine system.

There are people who perhaps to deal with their emotional problems, because of their inability to cope with life, may use marihuana on a regular chronic basis, and it is a way of escaping—other people can escape by withdrawing from society, by watching television all

the time, drinking heavily, so I think there is some reason for some concern for people who use marihuana on regular heavy basis.

It is clear those people have problems before they begin using marihuana. It is also clear that it is no different from other kinds of escapes that they would use.

It is quite different from physical damage caused by marihuana, of which there is no significant evidence.

Senator HATCH. You believe there is no evidence of physical damage or just not significant evidence?

Dr. BOURNE. There is not significant evidence at the present time. I do not want to make a flat statement because there are—there is evidence that if you smoked marihuana regularly, it does lead to bronchitis. But there is no evidence it leads to serious, lethal medical consequences.

Senator HATCH. What about in the case of pregnant women?

Dr. BOURNE. Well, any pregnant woman should stay away from all drugs, just as a matter of course. That is the time the fetus is particularly sensitive to any changes in the body environment.

We do not have concrete evidence that marihuana causes damage because, really, there have not been that many studies of chronic smokers who were pregnant.

Just as a general admonition, it is common practice to discourage anybody who is pregnant from using any drug.

We have recently had pretty devastating evidence of the damage caused by alcohol to fetuses, and there is pretty convincing evidence that women who are pregnant also should not smoke cigarettes.

Senator HATCH. Just plain cigarettes, let alone marihuana?

Dr. BOURNE. That is right.

Senator HATCH. You would certainly conclude that marihuana is more harmful to the user than just smoking cigarettes?

Dr. BOURNE. No.

Senator HATCH. You would not conclude that?

Dr. BOURNE. No.

Senator HATCH. You think cigarettes are equally as harmful to an individual as the use of marihuana?

Dr. BOURNE. Yes; 50,000 die from lung cancer.

Senator HATCH. You contribute that to cigarettes?

Dr. BOURNE. It is a major contributing factor.

Senator HATCH. You would not rate marihuana usage a more serious complication or problem than using normal cigarettes?

Dr. BOURNE. Based on the scientific evidence that we have in hand at the present time.

Senator HATCH. What about the psychological evidence that we have with regard to marihuana?

Are you really advocating here that people who use marihuana generally have a problem before they start using it, and that marihuana is not what caused the problem?

It is like alcoholism, generally these people have problems before they use it, and generally will have problems afterwards?

Dr. BOURNE. I think the analogy is a good one. I think we have 11 million people in the country who use marihuana on a regular basis.

Only a tiny percentage of those are going to become heavily dependent users, who use it as a crutch.

I think it is quite comparable to alcohol. We have a large number of people who use alcohol with good judgments, who use it sparingly in social situations, and we have a certain percentage who become alcoholics.

We have a relatively large number of people, many millions who use marihuana. We have a small percentage who become dependent on it, who use it regularly and, in a way, that is not anything but destructive to them in social behavior.

So I see it as a very comparable kind of situation.

I do not want in any way to suggest that I am saying, that I am advocating the use of marihuana or any drug. I think people should not use marihuana, should not use any drug substance, and particularly people who perhaps have other emotional problems and who are likely to be susceptible to heavy regular use.

Senator HATCH. I can see that I have taken enough time. Let me just say this.

On a number of the matters, I do not agree with you. But I want to mention to you that I think that you have just used great candor here, and your testimony has been not only interesting to me, but I compliment you for being as frank and forthright as you have been.

I wish we had more time to really discuss this, because I would like to do so with you.

We may submit questions to you. If we do not get them in by today, we will try to get them in by Monday, and if you could have them by Monday or Tuesday or Wednesday at the latest, I would appreciate it, your answers, that is.

I want to tell you I appreciate hearing your testimony.

Thank you, Mr. Chairman.

The CHAIRMAN. If it is at all possible, the committee would like to report these nominations, and when will you be ready with these questions?

Senator HATCH. Today or Monday morning.

The CHAIRMAN. Do you want them for the record?

Senator HATCH. I would think so.

We would have them today or Monday morning, and if we decide not to submit any, we will certainly let the committee know.

Is that OK?

The CHAIRMAN. We would like to move early next week.

Senator HATCH. I understand that. That is why I understand we will try to do everything we can to put them in writing.

The CHAIRMAN. Thank you very much.

Dr. BOURNE. Thank you.

The CHAIRMAN. In addition to the questions I would like answered in writing, I also have a list of questions submitted by Senator Hathaway. If you will have your answers to us by Monday afternoon, they will be inserted in the Record at this point.

[The information referred to and subsequently supplied follows:]

Questions from Senator Williams to Dr. Bourne with Responses

Q1. Because the Committee has received testimony in opposition to your nomination because of your position in favor of decriminalization of marihuana, would you briefly clarify your position for us? Do you also favor relaxing the laws on other drugs such as heroin and cocaine?

A1. I believe that drug laws should seek to discourage the use of drugs. I believe, however, that the penalties which those laws impose should not be more damaging to the individual than the drug use they seek to discourage. I believe also, with regard to marihuana, that this issue is still highly controversial and that opinions vary widely from one area of the country to another. I believe, therefore, that this difference of opinion should be taken into account by allowing people to set standards that have community support in different areas of the country. My position with regard to the decriminalization of marihuana is that the Federal law should be decriminalized with regard to simple possession of small amounts of marihuana for personal use. This would allow States to determine whether they wished to decriminalize their own laws or maintain criminal sanctions for possession of marihuana. I would also support continued criminal penalties against those who traffic in marihuana.

I do not favor decriminalization for possession of heroin or cocaine.

Q2. How much attention should be given to the abuse of prescription drugs? In this connection, you have been reported as favoring tighter control on barbiturates. Would you ban the prescribing of all three classes of barbiturates? Do you plan to submit recommendations for legislation concerning the control of barbiturates?

A2. I believe that prescription drugs are widely abused in our society. Next to heroin, barbiturates cause more deaths than any other abused drug apart from alcohol and tobacco. Because our national drug policy is based on reducing the morbidity and mortality associated with drug abuse, it is clear that the misuse of barbiturates must, therefore, be given a high priority. We are now initiating a comprehensive study of the use of barbiturates which will examine the adverse effects of these drugs, their requirements for legitimate medical needs, the availability of alternatives which may be safer and equally, or more, effective, and the economic impact on private industry of eliminating these substances. We will also be studying various mechanisms which might be used to reduce the availability of these drugs, ranging from a Presidential

admonition to special legislation. Careful attention will be paid to those classes of barbiturates for which there are still very specific medical needs, such as long acting barbiturates when used in the treatment of epilepsy. Any measure to restrict the use of barbiturates would be taken only if it could be assured that legitimate medical practice would not be, in any way, jeopardized.

Q3. Would you agree that alcoholism is a far greater problem than most drug abuse in numbers of persons adversely affected and its cost to society? If so, what recommendations would you make concerning correction of the imbalance in funding for these two programs?

A3. It is clear that alcoholism represents a far greater problem to American society in terms of the social cost than does drug abuse. However, the historic differences in the way society has treated these two conditions means that public attitudes towards the alcoholic and the drug abuser are widely different. Similarly, while we have made a commitment in the Federal Government to try to provide treatment for every drug abuser in the country, we have not done this for alcoholics in part because of the enormity of the problem. It is my belief that the Federal Government should take a substantially greater responsibility in terms of providing care for alcoholics than it does at the present time. I believe, however, that we should not look at appropriations in this area as an either/or situation with money either going to drug abuse or to alcoholism. Instead, we should seek to increase the support for alcoholism while maintaining what is now a relatively adequate level of support for drug programs.

Q4. The Committee has recieved expressions of concern that alcoholism policy may become fragmented and that alcoholism might lose its categorical emphasis by being combined with other drugs. In this connection, would you clarify the policy-setting roles of the Commission on Mental Health, the Department of Health, Education, and Welfare, and you as Special Assistant to the President in connection with alcoholism?

A4. The Presidential Commission on Mental Health was established to look at all aspects of mental health. This includes alcohol, drug abuse, and the broader mental health area. As part of the activities of the Commission, a Task Force on Alcoholism will make reports to the Commission, and recommendations on alcoholism will be part of the final report submitted to the President. My responsibility as Special Assistant to the President includes the general

area of health, including alcoholism. Obviously, I do not have the legislative authority in this area that I would have through the Office of Drug Abuse Policy relating to drug abuse, but will seek to serve in any way that I can to facilitate coordination of alcoholism programs in the Federal Government and to be an advocate to the extent that I can.

Q5. Do you favor combining the alcoholism and drug abuse programs in a new substance abuse agency? What do you see as the pros and cons of such a combination? Do you favor inclusion of alcoholism in the Office of Drug Abuse Policy? Would that not be a first step toward combining the programs in HEW? What assurances would you give the Committee that a special deputy and other staff with expertise in alcoholism would be appointed? In this connection, why does the Commission on Mental Health have no members or staff with expertise in alcoholism?

A5. The suggestion has been made that alcoholism might be included by legislative action within the purview of the Office of Drug Abuse Policy. Should this occur, I would be happy to assume that additional responsibility provided adequate provision was made for additional staff with expertise in alcoholism. At the same time, while I would be happy to accept that responsibility, I don't feel that it is appropriate for me to be actively soliciting that role.

While there is not at the present time a full time paid staff member on the Commission on Mental Health with expertise in alcoholism, I know that it is the intention of the Executive Director, Dr. Thomas Bryant, to include persons with that kind of background in the future. He has already established a Task Force on Alcoholism as part of the overall structure of the Commission.

Q6. Would you define your role in the development of drug abuse policy during the Nixon Administration? Do you feel law enforcement goals should dominate policy?

A6. From 1973 to 1974 I was employed as the Assistant Director of the Special Action Office for Drug Abuse Prevention. That agency was responsible for treatment and rehabilitation activities and not law enforcement. My own responsibility related to the area of treatment policy. In that role, I was responsible for seeking to increase the treatment capacity throughout the country, enhancing the coordination between State and Federal agencies, and sought vigorously

to shift the focus of the Federal treatment effort away from an exclusive focus on heroin to include the so-called polydrug problem. No, I do not feel that law enforcement goals should dominate policy. We need a balanced approach, so that law enforcement and treatment programs complement each other.

Q7. How effective is methadone maintenance? Why has it been the dominant therapeutic modality funded by the Federal Government?

A7. The commitment to support methadone maintenance, a policy decision made in 1971, was based on the desire to get the largest number of people into treatment programs in the shortest period of time. It has become clear over the years that methadone maintenance offers a very successful approach to treatment for certain individuals and not with others. In general, however, the evidence suggests that there is not a great deal of difference in the effectiveness of methadone maintenance, therapeutic communities, or other treatment modalities in terms of their outcome. The success rate of all treatment is tied much more to the quality of the treatment services provided in terms of counselling, rehabilitation, job training and other support services rather than whether the person is on a maintenance drug or not. It has been a popular misconception that methadone maintenance has been the dominant therapeutic modality supported by the Federal Government. This is in part because of the intense publicity it has received. In fact less than 50 percent of the Federally-funded slots have been for methadone maintenance. It is my intention to examine in more detail the possibility of greater Federal support for other therapeutic modalities, particularly therapeutic communities, and to try to shift the emphasis of treatment somewhat away from a pre-occupation with heroin so that we have greater focus on the so-called polydrug problem.

Q8. Would you discuss the best methods of educating our young people to prevent alcoholism and drug abuse? Are you familiar with the prevention programs in the Office of Education? NIAAA? NIDA? Would you comment on them?

A8. A variety of approaches have been used to educate young people with regard to alcoholism and drug abuse. The ability to measure the effectiveness of these programs is limited and much of what we do is still based on faith. In general, we have been able to define only a few prevention and education programs that are specific to the problems of alcoholism and drug abuse. There has been a move in recent

years towards dealing with the general adjustment problems of adolesence as the most effective way to reduce subsequent dependence on alcoholism and drugs. At the same time, these programs aimed at increasing the overall emotional adjustment of young people tend to reduce their involvement in a wide variety of deviant behavior, not just drug or alcohol abuse. It is also clear that some of the most effective preventive functions relate to development of adequate job opportunities for young people and giving them other meaningful activities to reduce the boredom and lack of adequate fulfillment in their lives which leads them to turn to drugs and alcohol to fill a vacuum. I am generally familiar with the prevention programs in the Office of Education, NIAAA and NIDA and while I feel that they have been carefully evolved over several years, they warrant additional examination, and I hope that we will be able to provide this kind of policy overview from ODAP.

Q9. There has been considerable criticism of the Drug Abuse Warning Network (DAWN). How well do you think this reporting system is working? Are its data a firm basis for action? How can the system be improved?

A9. A satisfactory reporting system, which would indicate the extent to which various drugs were causing morbidity and mortality around the country, and would flag the development of new drugs of abuse on the street, has been both greatly needed and difficult to develop. Despite clear methodological deficiencies in the DAWN system, it is by far the best method we have at the present time for providing this data. I hope that we can continue to refine the methodology in order to avoid some of the legitimate criticism which is now being made. I am quite satisfied that the basic system is sound and that it is merely procedural details that we have problems with. Overall I have found this system to be highly satisfactory in terms of keeping us aware of what's going on in the country in a general way.

Questions from Senator Hathaway to Dr. Bourne with Responses

Q1. The law creating ODAP authorizes its Director to "make recommendations to the President with respect to policies for, objectives of, and establishment of priorities for, Federal drug abuse functions," and to "coordinate the performance of such functions by Federal departments and agencies."

How many Federal departments and agencies are actually involved in performing Federal drug abuse functions?

How will an Office with a very limited budget and staff be able even to analyze, let alone coordinate, the functions of all those agencies?

Both of you were associated with SAODAP in major ways. SAODAP had the reputation among many drug abuse experts for abrasiveness -- which caused some agencies to stop cooperating with SAODAP, and which made it doubly difficult in Congress to create this new Office last year. How can you guard against the recurrence of this problem in the future?

Both of you have backgrounds in the treatment end of drug abuse policy. Will that make it more difficult to coordinate functions at the criminal justice end? How will you overcome your personal lack of experience in this area?

A1. At the present time there are approximately 20 major Federal agencies involved in the drug abuse field and as many as 51 agencies and bureaus that have some functions which impinge on this area. Despite the limited budget and staff of ODAP, I believe that we will be able to effectively coordinate the activities of these various agencies. Unlike the Special Action Office for Drug Abuse Prevention, we intend to restrict our activities purely to policy considerations and not to become involved in the programmatic activities of the agencies or their internal management. In addition, although the full time staff of ODAP will be small, we hope to draw on the resources of other agencies on a short term basis to carry out specific functions and studies. We also expect to draw on the private sector, using consultants and other resources to maximize the effort and potential of our staff.

I believe that SAODAP did have a reputation for abrasiveness with many of the agencies which I believe was largely due to an effort to impose itself on the internal management and operation of those agencies. Being very sensitive to this

issue, I hope that we will be able to prevent ODAP from following the same course. We hope to restrict our activities to overall interagency coordination and primarily to those policy issues that cut across agency lines. It appears that the carefully established coordinating mechanisms that we are operating with at the present time have been reasonably successful in achieving that goal. Although both Mr. Dogoloff and I have been involved in treatment activities at different times in our lives, I, myself, have for the last ten years, had close working relationships with law enforcement agencies in this field first in the State of Georgia and then in the Federal Government. At the present time I regard my relationship with the Drug Enforcement Administration as being extremely sound and one of mutual respect. In addition, we are in the process of hiring for ODAP a number of experts in the law enforcement field, including a Police Chief of a West Coast city and a Regional Director from the Drug Enforcement Administration. With this kind of back up, and my own experience over the years with law enforcement agencies, I feel that we will be more than qualified to carry out this coordinating function.

Q2. Dr. Bourne, I understand it is your desire to retain the role of "Special Assistant to the President" for certain health matters after you are confirmed. Can you tell the Committee what your function will be in that role?

Do you see that position as in any way interfering with your ability to carry out the duties of the Director of ODAP?

Are there any ways in which being a Special Assistant might help you as Director of ODAP? Or be of benefit to the drug abuse field?

Does holding that position conflict in any way with the requirements of Section 202 of the Act, that you "not hold office in any other department or agency of the United States . . .?"

In the course of carrying out your duties and responsibilities in the White House, will you agree to limit your functions as "Special Assistant" to areas that are in some way related to drug abuse policy? (That is, you will not become an energy advisor, or a mass transit advisor, but will limit your activities to the general health policy areas you've specified.)

Your recent responsibilities for international health affairs will further preclude involvement in direction of ODAP, will it not?

A2. I would like to retain my designation as Special Assistant to the President advising him on certain health matters. It is a role that I have had formally or informally with him over the last seven years and I believe that whether I have this specific designation or not he will, from time to time, ask for my advice and suggestions in the health area outside of drug abuse. I do not believe that this will in any way interfere with my ability to carry out the duties of Director of ODAP. At the same time, the formal designation as Special Assistant to the President, I think, will allow me to have a more decisive role in carrying out the functions of that Office. The designation as Special Assistant, I believe, carries with it a certain authority which would clearly enhance my role as Director of ODAP. This automatically would be a benefit to the drug abuse field. With regard to Section 202 of the Act, this question has been raised and I have sought advice from the White House legal counsel. In his opinion, which has been submitted to the Committee, he states that these dual positions do not in any way conflict with the requirements of that Section.

My functions as a Special Assistant will be limited to those relating to the health area. Additionally, I do not believe that my recent involvement in the field of international health will in any way further preclude my carrying out the functions as Director of ODAP. In fact, the international health area is so intimately involved with the drug field, particularly in our efforts to reduce the use of drugs in developing areas of the world, that it can be considered almost a part of the directly required functions of ODAP.

There was no "#3" question submitted to me for response.

Q4. During his campaign, and since his election, President Carter indicated his strong concern for both drug abuse and alcoholism. However, in his new budget submissions, only drug abuse came in for increased funding -- with alcoholism held level for FY77 and FY78 at basically the FY76 funding level. Doesn't this simply repeat the pattern of the Ford and Nixon Administrations -- favoring drug abuse while ignoring the far larger health problem of alcoholism?

Even though alcoholism is not actually within the jurisdiction of ODAP, don't you personally believe we need more Federal resources for alcoholism? Will you at least agree to carry our concern to President Carter about his funding proposals for alcoholism? (and urge him to reevaluate those proposals).

A4. I do strongly support the need for increased funding for alcoholism programs. And I will be delighted to serve in an advocacy role, either formally or informally, within the White House for this area. I believe that the discrepancy in funding increases for the new budget submissions should not be interpreted as a reduction in the President's commitment to alcoholism. This budget, as you know was developed in a very short time frame, and it was not possible to provide the adequate review and input that I hope this area will receive in the future. I will be delighted to do my very best to carry the concern of the Committee to President Carter, and to do what I can to ensure that there is sufficient increase in funding suggested for next year's budget.

Q5. While the ODAP legislation specifically requires the Director to promote the coordination of drug abuse policy among Federal agencies, isn't it also important to analyze and coordinate the way each such agency impacts on State and local governments and programs?

What are some of the needs in this area? How can we at the Federal level make drug abuse treatment more efficient and more rational at the State and local level?

Do you intend to study and make recommendations regarding the burdens on State and local programs generated by the data needs and reporting requirements of different Federal programs? Do you intend to examine such requirements in non-drug programs such as Title XX of the Social Security Act, where those programs are used to fund drug abuse treatment, and make recommendations in such areas?

A5. I believe that strong Federal-State relations are essential to the maintenance of a strong drug abuse program in the country. Perhaps one of the most successful components of the SAODAP legislation was the establishment of the Single State Agencies in each State. As a former Director of a Single State Agency in Georgia, I believe that I am particularl sensitive to the needs of the States and their relationships to the Federal Government. In addition, the cities, which in the past have not generally had a great interest in this area, have in recent years developed strong and deep concerns. To this end I have spent a good deal of time working with the National League of Cities and the U.S. Conference of Mayors including meeting recently with their Committee on Drug Abuse. It is our intention to carefully study the relations between the Federal Government and State, city and local governments to see if we can find ways to better coordinate our activities. I believe a frequent interchange of ideas and communications are the most effective way to achieve this. I hope also that we will be able to consolidate

various reporting systems, not merely between different agencies at different levels in the drug field, but also hopefully to establish a single data reporting system for drug abuse, alcohol, and mental health programs funded by the Federal Government.

We do intend to actively examine requirements in non-drug programs such as Title XX of the Social Security Act and Section 504 to see how those programs can be used to fund drug treatment. I feel that these supplemental funding sources, both within the Department of HEW and the Department of Labor, are going to be crucial in the future to ensure that we have an adequate, comprehensive network of resources to help fully rehabilitate the addict.

Q6. What do you believe to be appropriate goals for individuals who enter drug abuse treatment? Is it enough for most drug abusers simply to get them temporarily off of drugs -- or do we have a greater responsibility to many people which we are simply failing to fill?

Do we have any obligation, for example, to determine whether such individuals are employable when they leave treatment?

What are the shortcomings of methadone maintenance programs which make no effort to take into account the social and economic problems of the clients?

Should we be making a better effort to coordinate drug treatment programs with manpower training or education programs? Will you be considering that kind of "coordination" at ODAP?

A6. The goals for individuals entering treatment can vary widely; they are not always the same for every drug abuser. In general, the overall policy, I believe, should be to reach the largest possible number of people using whatever modalities of treatment will attract them. The primary objective is not merely to provide treatment, but to remove as many people as possible from the heroin or other drug using market. For some individuals, treatment can amount only to short term detoxification because these individuals are either not ready or are unwilling to accept long term rehabilitation. For those who are motivated to receive longer term treatment, whether it is through methadone maintenance, therapeutic communities, or other approaches, the goals should very clearly be full and complete rehabilitation, with the return of these people to a normal,

functioning, productive role in society in which they are free of all drugs. We must, however, set our goals realistically, and recognize that not all individuals will be so strongly motivated or so receptive to such comprehensive treatment. There has always been a dilemma as to whether drug treatment programs are responsible for restoring people to the level of functioning they were at before they became involved with drugs, or whether there is an additional responsibility in terms of making those people employable and obtaining for them jobs, even though they may not have been employable or have had any marketable skills prior to their becoming involved with drugs. I believe, however, that every effort should be made to ensure that people leaving treatment programs are employable and are able to be self-sufficient and drug free.

Methadone maintenance appears to be an extremely effective treatment modality when operated on a small scale with highly competent staff. The problems with methadone maintenance have arisen, not because there were deficiencies in the approach, but because of poor management and the attempt to expand its availability too fast with the result that we have poorly run clinics, inadequately trained personnel, and poor delivery of services. I think there was a tendency to focus too much on the methadone itself when, in fact, the really important elements for success are the supportive rehabilitative services and the management of the programs. I believe we should now focus our effort on these issues, and attempt to raise the quality of rehabilitative services to the maximum possible degree.

I believe that there should be a close coordination between drug treatment programs, manpower training, and education programs, and I will work to ensure that there is close coordination between all of the Federal agencies that are capable of providing supporting services on an integrated basis with our drug treatment programs.

Q7. The United States has a relatively poor track record in approving international treaties and protocols in the area of drug abuse. Why is this so? How does it affect our relations with other countries? Do you have any recommendations in this regard?

A major international drug problem today seems to be the treatment of Americans incarcerated in foreign prisons. Is the U.S. doing enough to safeguard human rights of American prisoners abroad? Do you intend to involve yourself with this problem?

Do you believe the U.S. should sign the Convention on Psychotropic Substances? Why?

Could you comment on the efficacy of purchase agreements for the Turkish and Burmese opium poppy crops?

What was done to substitute other cash crops for opium?

What is your opinion of U.S. options to raise poppies for our domestic codeine production?

A7. The United States has a relatively poor track record in approving international treaties and protocols in the area of drug abuse. This is because a variety of special interests have managed to successfully block legislation in the past that would have provided ratification in the Congress. It is my intention to make ratification of various international conventions, particularly the Convention on Psychotropic Substances, one of our highest priorities and I have the President's concurrence on this issue. We hope that legislation will be introduced in this session of Congress to ensure that the Psychotropic Convention is ratified. Our failure to do so has seriously jeopardized our leadership role in the international drug abuse field, and I feel that ratification would constitute a major step forward and a significant enhancement of our credibility in this field.

There has been considerable controversy over the extent to which we should become involved with the issue of Americans involved in foreign prisons. It is clear that virtually all of these people have been involved in drugs, and that many of them were significant traffickers even if they are relatively young. I believe that we must safeguard human rights and ensure that these people receive adequate due process. However, I don't think that we can in any way encourage young Americans to feel that they can go to foreign countries, violate their laws, and then be treated by a different standard than the nationals of that country. Where clear cases of injustice have occurred, we have made every effort to become involved and to protect the rights of the individuals arrested. I intend to work closely with the State Department on this issue.

The program conducted with our support, by the U.N., to control the licit cultivation of opium in Turkey has proven extremely satisfactory. And Turkey, which once supplied the overwhelming majority of narcotics coming illegally to this country, has now ceased to be a source of any significance. In Burma, there is no licit cultivation, but on my recent trip there I received very strong assurances

from members of the Burmese Cabinet that they are giving the eradication of opium cultivation a very high priority. In my travels around the country I was absolutely convinced of the sincerity of their commitment and the initial success of their eradication program. It appears that they have reduced the cultivation by many thousands of acres this year, and have successfully attacked virtually all of the opium caravans. Similarly in Thailand I received strong assurances from Prime Minister Tanin of his commitment to deal with the heroin trafficking problem and corruption within his own government. During my time there I also saw strong evidence that this commitment was being put into practice. In conjunction with the United Nations Fund for Drug Abuse Control we are supporting the crop substitution programs in Asia and other areas of the world. We are also hoping to involve some private industry from this country in supporting some of the crop substitution programs. Although this is a long range solution, I believe that it must be an essential part of our overall policy.

After very careful deliberation and input from both the private sector and all involved Federal agencies, it is out anticipation that we will make a decision shortly to prohibit the domestic cultivation of Papaver bracteatum for commercial purposes. We feel that to permit it would create serious international problems for us and that the need for this source for codeine and other drugs is not sufficiently great to warrant permiting this cultivation at the present time.

Q8. Do you believe there has been a bias in Federal drug abuse policy toward hard drugs, illicit drugs, as opposed to the abuse of licit drugs, such as prescription tranquilizers and amphetamines?

How much attention do we need to pay to the abuse of licit drugs in formulating federal policies? In funding treatment and prevention programs?

Will you also seek to coordinate federal drug abuse policy in the area of licit drugs? Do you intend to work with the Food and Drug Administration in this area?

To what extent do we need to concern ourselves with physician prescribing practices? Don't too many physicians today over-prescribe tranquilizers and other drugs?

What about the use of drugs in the treatment of alcoholics and addicts? Don't we need to give more careful analysis to situations in which such treatment is contra-indicated?

A8. I believe that priorities for Federal resources should be established according to the relative damage which drugs cause to our society, as measured by deaths, disability and their impact on the illicit trafficking system. This inevitably means that heroin has to be made the top priority. I believe, however, that there is clear evidence that barbiturates and other non-narcotic drugs also cause significant numbers of deaths. We have already initiated a detailed study on the possibility of removing certain barbiturates from the legal market and will continue to focus on the so-called polydrug problem as a high priority. I think it probably is true that in the past we have paid too much attention to cocaine, a drug which appears, as presently consumed in the United States, to cause rather minimal health problems. I believe that we should pay a good deal of attention to the abuse of licit drugs in formulating our Federal policy. Because I believe that the problems of people who get into difficulties with these drugs are somewhat different than the problems of those who get into difficulties with heroin, I believe it is important that we integrate treatment of these individuals with broader mental health services. We must, however, ensure that they are given sufficiently high priority so that they are not neglected. We are already working closely with the FDA and with NIMH in this area.

One of the serious problems is overprescribing by physicians. We plan to examine this area carefully, hopefully to work towards greater education of physicians in terms of misprescribing of tranquilizers and also to move aggressively in the law enforcement area against those physicians who knowingly violate their ethical codes and provide abuseable drugs to drug abusers for profit.

I am very aware of the serious problem that arises in many instances where usually unsophisticated physicians use excessive amounts of drugs, particularly tranquilizers, to treat alcoholics and addicts, resulting in the substitution of one severe drug problem with another. I feel that a good deal of effort must be given to educating physicians, and increasing their expertise in the appropriate handling of these conditions.

Q9. To what extent is the physician-addict or physician drug abuser a problem in this country today?

The A.M.A. has recently begun to campaign more vigorously against the addicted physician, and they have drafted a model state law that gets tough in this area. Will you support that effort, and develop an equally hard-nosed Federal policy in this area?

A9. Before the spread of drug abuse among young people, physicians constituted the single largest population abusing drugs in this country. In the past, it has been customary for organized medicine to pretend that the problem didn't exist and to hide it among their ranks. Happily there has been a dramatic change in recent years and the AMA has taken a strong leadership position in trying to identify and help the disabled physician. I have been in close contact with those in the AMA involved in this effort over the years and plan to support it strongly by encouraging a mixture of compassion with some tough laws to ensure that physicians who become dependent are not left as a hazard to society but are forced to get appropriate treatment.

Q10. We held hearings several weeks ago on the subject of preventing the abuse of drugs (and alcohol). What thoughts do you have on the development of an effective prevention policy -- and what role will prevention play in ODAP?

Isn't it difficult to separate values about drugs and alcohol from the rest of an individual's values? To what extent is the entire lifestyle of a person related to his or her drug-taking behavior? Is it appropriate for drug abuse programs to work with the whole lifestyle?

A10. Although I regard prevention as an extremely important element in our overall strategy for dealing with drug abuse, I don't anticipate that we will have the resources to devote a great deal of ODAP's activities to this area. The problem of prevention is highly complex, and we have yet to demonstrate clear-cut measures that will specifically reduce the abuse of drugs and alcohol. As you indicated in the question, it is very difficult to separate values about drugs and alcohol from the rest of an individual's values, and I believe that effective prevention must relate to the entire lifestyle of a person. While drug abuse programs may be able to help in this regard, they cannot be expected to take on the full burden either financially or in other ways for promoting programs that will help a person in this area. Where the resources permit, I feel that it is appropriate for drug abuse programs to work with the whole lifestyle, but resources are limited and I believe that other sources of support must also be involved.

Q11. You have been widely quoted recently regarding your views -- and those of the President -- on the subject of marijuana decriminalization. What is your position on marijuana at this time -- and how do you expect that position to affect policies generated by ODAP?

Do you believe we know enough at this time about the long range toxicity of marijuana to justify taking steps that would make it widely available?

Do we have any information that would enable us to predict the effects of nationwide decriminalization or legalization on the incidence of use?

What are your views on the subjects of heroin decriminalization and heroin maintenance?

Do you believe heroin decriminalization would have any dramatic effect on crime? What about recent surveys showing that in most addicted individuals, criminal behavior begins prior to addiction -- and often remains even after a person stops using drugs?

Some individuals have urged the government to experiment with heroin maintenance programs. Can we ever design such an experiment with adequate controls?

All. Because of my oral testimony on the issues raised in this question, I feel that it's probably not necessary to duplicate my statements.

Questions from Senator Williams to Mr. Dogoloff with Responses

Q1. Would you define your role in developing drug abuse policy during the Nixon and Ford Administrations.

A1. During the Nixon and Ford Administrations I was employed as a Civil Servant at the Special Action Office for Drug Abuse beginning in September 1972, then at the National Institute on Drug Abuse in 1974, and then in the Office of Management and Budget beginning in December of 1975.

As Director of the Division of Government Assistance in the Special Action Office for Drug Abuse Prevention, I was responsible for developing and maintaining effective liaison with State, regional and local government levels and for assisting them in initiating and improving their drug abuse prevention efforts. I planned, directed, coordinated and reviewed all Division programs. These included technical assistance programs, both direct and contracted, the development and evaluation of drug programs, the training of key personnel in all phases of drug abuse program management and the initiation of a consistent record for data management systems. In addition, I worked with other Federal officials to ensure that Special Action Office policies were implemented as a comprehensive Federal strategy.

As Director of the Division of Community Assistance in the National Institute on Drug Abuse, I supervised a staff of 60 and was responsible for a budget in excess of $150 million. I was responsible for all Federally funded treatment and rehabilitation programs, and for the program of special formula grants provided to all Single State Agencies for Drug Abuse. I also dealt with programs which affected both the criminal justice and drug abuse treatment systems. I also had the responsibility for providing all necessary management and technical assistance to these programs and providing consultation on the development of national policy, program management and clinical services in the countries of Thailand, Iran, Colombia and Venezuela.

From May to October 1975 I was on special assignment to the Domestic Council Drug Abuse Task Force which prepared a major policy review entitled White Paper on Drug Abuse. I directed the treatment study group involving 40 individuals from 15 agencies.

Beginning in December 1975 as Deputy for Prevention in the Federal Drug Management Office of the Office of Management and Budget, I provided Executive Office oversight and coordination responsibilities to the prevention, treatment, and rehabilitation programs throughout government; and played a role in ensuring implementation of Federal drug policy and follow-up on the White Paper recommendations. Part of my responsibilities included leading inter-governmental efforts to determine the effectiveness of treatment and establishing interagency work groups on employment, prevention and criminal justice interface. I also provided international technical assistance activities and maintained broad professional contacts within the field of drug abuse.

Q2. How effective do you feel methadone maintenance has been? How much support do you feel should be given to drug free modalities?

A2. Methadone maintenance has been found to be very helpful for many individuals to help with heroin addiction. It has been widely misunderstood and probably oversold as to what it in fact can do. In essence, methadone maintenance can merely serve as an effective tool when used properly to deal with the drug craving and addiction problem of heroin addicts. Once this is done, the person is left with the same assets or liabilities that he or she had prior to becoming involved with heroin. This means that for many people who are under-skilled and have other social and rehabilitation needs that these needs must be met by effective counseling, vocational rehabilitation, training, job placement and other kinds of activities. Methadone maintenance per se will not deal with any of those kinds of issues. It is not a cure-all. However, some of the data on four-year followups show a drastic reduction in daily heroin consumption for persons who have undergone methadone maintenance. On balance, I think it is an important tool which should be part of the treatment arsenal that we have to deal with the difficult problem of heroin addiction.

Drug Abuse and drug addiction are very difficult problems. It is essential that we have sufficient treatment services available in our communities so that people can avail themselves of a variety of options to deal with their drug problems. No one modality, be it chemotherapeutic or drug free, can serve the needs of our total drug abuse

treatment population. The balance that needs to be struck should be in keeping with patient demand and the principle that multiple options be available.

Q3. Would you discuss your views on prevention strategy?

A3. If we knew how to prevent drug abuse, that would clearly be the ideal solution to the problem. However, through the last several years of experimenting with a number of different prevention strategies, we have learned a great deal about what does and does not work. We know that scare tactics and the early media campaigns aimed at showing youth the horrors of drug addiction did not impact their drug use as we would have liked. To the contrary, what we have learned is that the most effective drug abuse prevention strategies are those strategies which do not focus on drug abuse per se but rather recognize that, particularly for young people, the decision about whether and how to use drugs is one that occurs not in a vacuum but rather along with a number of other value judgements that people make during pre-adolescence and adolescent phases of their lives. To the degree that we are able to find ways of "growing healthier children psychologically" we will not only be able to enhance our children's ability to make better decisions about drug use, but simultaneously impact and enhance their decision making regarding a number of other issues such as alcohol use, delinquency, sexual values, and so forth. In essence, it is important to recognize that drug abuse does not occur in a vacuum in one's life and it is difficult to isolate it as such. We must recognize that continued efforts in multiple agencies throughout our government each to focus on a small aspect of prevention are inefficient and probably ineffective. Hopefully this Administration will take this problem into consideration as it considers reorganization. If we combine and focus prevention activities under one umbrella we could identify specific knowledge gaps and address them on a demonstration basis with programs that could be appropriate to areas such as drugs and alcohol.

Q4. What is your view on the DAWN reporting system and what recommendations would you make to improve its effectiveness?

A4. The DAWN reporting system, while not perfect, is an important tool to monitor abuse patterns. It may have some deficiencies, but these have been consistent over the last several years so that we can use it to track trends. However, there is no question as to the fact

that it needs to be studied. A quarter of a million dollars has been set aside by both NIDA and DEA to study ways of improving the effectiveness of DAWN. The Office of Drug Abuse Policy intends to take the lead in this study to bring in both outside experts and people within government to look at issues of not only where it should best be located within the government structure, but more important issues regarding the reliability and validity of hospitals sampled, the quality of the data collected, and what improvements can be made so that we can have sufficient confidence in being able to generalize from the sample to make some policy decisions regarding the treatment and control of drug abuse in our country.

Q5. I understand that you were instrumental in the development of the White Paper on Drug Abuse in 1975. Do you agree with the statement that alcoholism has "a greater historical basis of support and integration with community health care delivery systems (than other drugs) and receives the vast majority of its financial support from non-federal sources -- . . . "? Does this view of alcoholism explain the inequity in budget requests for alcoholism as compared with other drug programs?

A5. Yes I do. I understand that Federally funded alcoholism treatment accounts for a very small percentage (probably less than 10 percent) of the total alcoholism treatment available within our country. Federally funded treatment for other drugs of abuse, on the other hand, accounts for nearly a 50 percent of the treatment available, in partnership with state, local and private funds.

Some people have used this fact to justify the lower level of Federal funding allocated for treatment services for alcoholism in contrast to other drugs of abuse. However, this argument does not take into account the relative social costs of the two problems. We are very much concerned about the insufficiency of funds that are currently available for alcoholism treatment. This is particularly true in view of the fact that 26 states have moved towards the decriminalization of alcoholism which will place an even greater burden at all levels of government to support effective detoxification and treatment services for alcoholics.

Questions from Senator Hathaway to Mr. Dogoloff with Responses

Q1. Were you employed at OMB at the time the President's White Paper was issued? What role did you play in the creation of that document?

A1. At the time the White Paper was issued I was employed at the National Institute on Drug Abuse as Director of Community Assistance. However, when the White Paper was conceived my services were requested by the Domestic Council to head an interagency group which developed issues, conducted analysis, and prepared a first draft for the demand reduction area. This included treatment, rehabilitation and prevention issues which I did on special detail to the Executive Office.

Q2. Do you agree with all of it's conclusions?

A2. In answering that question, let me place the process in perspective. The White Paper is a product of an interagency effort which, as such, generally represents a concensus of those participants in the review and analysis process. As a result, the White Paper is not the most definitive nor indepth study which could be accomplished; rather, it is an articulation of the then present policy and programs of the Federal Government and contains recommendations within that framework for future program changes. Since it is a concensus document based on the interaction of many agencies involved in drug abuse, all of the recommendations and conclusions are not totally endorsed by each and every individual. In addition, my involvement in the White Paper was restricted to the demand reduction areas including treatment, rehabilitation and prevention. As a concensus document, I would generally stand behind all of the recommendations in the White Paper relative to those areas.

Q3. While the White Paper did acknowledge the need for increased efforts in prevention and treatment, that need was tied to stricter enforcement policies which would theoretically dry up the supply of drugs on the street. "Lock up all the pushers, and the addicts would come crying for treatment." Is that a realistic way to assess treatment needs? Isn't that a similar rationale to the one Rockefeller used several years ago, when he enacted his "toughest in the nation" drug law in New York State? Didn't Rockefeller's New York approach fail to significantly reduce either the availability of drugs or the incidence of addiction?

A3. I think the conclusion that you are suggesting regarding the success of the "Rockefeller law" is correct. In my mind, the "Lock up all the pushers, and the addicts would come crying for treatment" is a most simplistic statement

of an extremely complex problem. There is some indication that as supply becomes more scarce, the number of addicts seeking treatment does increase; however, this seems to overlook the issue of the casual user and those abusers who never show up for treatment but rather just stop using or switch to some other substance. While there is a strong relationship between supply and demand sides of a drug issue, we must look both at the total relationship and each segment as well. In this regard, the statement taken alone would lead to a totally faulty way of assessing the real treatment needs of our country.

Q4. The White Paper also called for increased treatment efforts -- but said they should be funded from -- and I quote -- "the enormous potential resources available to State and local law enforcement agencies, and to State and local and private prevention, treatment and rehabilitation services." Do you agree that such enormous potential resources are available?

A4. The use of the phraseology "enormous potential resources" is essentially an overstatement and probably a poor choice of words to underscore the point that each level of government must prioritize its efforts and resources and that to some degree there may be additional resources available at State and local levels of government. The Federal Government and all its programs cannot be expected to do all things to all people, rather State and local jurisdictions must compliment the Federal effort and tailor programs and resources to the specific needs of their communities. However, the White Paper also goes on to say on Page 77, "In addition, further demands are likely, since NIDA treatment utilization has grown by approximately 3,000 patients per month during the past year. That rate has slowed in recent months, but it is reasonable to expect some additional demands from communities. -- Therefore, the Federal Government should be prepared to fund additional community treatment capacity." As a result of that recommendation, 7,000 additional treatment slots were, in fact, provided in the budget as part of implementing that recommendation of the White Paper.

Q5. The White Paper also announced the continued pursuit of the goal of including drug abuse services in national health insurance and other programs designed to meet overall health needs. However, it expresses that "it is a long term goal" but found it impractical to do so at this time. Do you agree with that conclusion? Since

President Carter is committed to developing a scheme of national health insurance, what do you see as the appropriate role for addiction services in any such scheme?

A5. At the time the White Paper was written, I believe that answer was correct within the context that a national health insurance program seemed in the very distant future. Even that reality not withstanding, it is important to recognize that the National Institute on Drug Abuse has begun a vigorous program of preparing the drug abuse industry for inclusion in such a national health insurance scheme. This must further be viewed within the context of the rapid development of drug abuse programs in relying primarily on uncredentialed but very talented paraprofessionals who were for the most part outside of the traditional health care systems. Programs to change that, such as credentialing of workers in the field, developing standards for treatment centers, working along with the Joint Commission on Accreditation of Hospitals, etc. are beginning to lay the groundwork for acceptance of drug abuse services into the national health insurance scheme. However, I do feel that this is an evolutionary rather than a revolutionary process and in the long term may be the correct goal.

Q6. Finally, one of the major problems of the White Paper was the unwillingness of its authors to appear before the appropriate Committees of Congress to discuss its findings and respond to our questions. Who made the decision to ignore Congressional invitations to testify?

A6. Senator, I believe that the individuals you refer to were part of the White House and did not include any of the career staff or any other agency participants who played such a heavy role in developing the document. As a result, I understand they felt that it was inappropriate to appear before the Congress prior to having the agencies completely staff out the recommendations of the White Paper. Additionally, to my knowledge, the decision was made by those individuals who were specifically invited and that was completely out of my sphere of influence.

Q7. As part of all confirmation hearings, we ask nominees to agree to appear before any duly constituted Committee of Congress at any time their appearance is requested. In this case, I believe this question requires an extra commitment on your part to be available to account for your policies. Will you make that commitment?

A7. Senator, I will make that commitment unequivocably. I have already made that position very clear in my opening statement and have already begun to confer with several members of Congressional staffs. I feel we have developed good working relationships at the staff level and you can be absolutely certain of not only my willingness to appear before any duly constituted Committee of Congress at any time, but my commitment to work closely with the Congress on all issues involving the Office of Drug Abuse Policy.

Q8. President Ford refused to create ODAP, even though he signed the law establishing that Office, and he refused to spend the money appropriated by Congress for that purpose. Mr. Dogoloff, you were in OMB at that time -- what advice did you give, and what role did you play in Ford's refusal to fund ODAP?

A8. At the time that decision was made, I was in the Office of Management and Budget, specifically in the Office of Federal Drug Management. The decision, however, was made by Mr. O'Neill and the White House structure. The question of creating ODAP appeared to be of keen personal interest to Mr. O'Neill and he did not give me an opportunity to discuss it with him. My advice was neither sought nor given on that matter.

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The CHAIRMAN. We have four other witnesses.

First, Glen D. King, executive director, International Association of Chiefs of Police.

STATEMENT OF GLEN D. KING, EXECUTIVE DIRECTOR, INTERNATIONAL ASSOCIATION OF CHIEFS OF POLICE

Mr. KING. I express appreciation to you, Mr. Chairman, and Senator Hatch, for permission to appear today.

I will speak very briefly about the nature of the International Association of Chiefs of Police. We are a membership organization composed primarily of police chiefs. We have about 10,800 members in 64 nations. The majority of our members are police administrators in the United States. It is on behalf of the membership of IACP that I appear here today to speak in opposition to Dr. Bourne for the post for which he is proposed.

I have submitted testimony to this committee, and with your permission I will not read it because it will be time-consuming. I will speak very briefly, synopsize it, and make myself available for questions.

Our opposition to Dr. Bourne's appointment to this position is based almost completely on his support of decriminalization of marihuana, and indications that he has made in the past that he would, under certain conditions, perhaps support decriminalization of cocaine and other prohibitive substances.

We believe, for a number of reasons, that marihuana is properly covered by criminal sanctions by Federal statutes as well as by State statutes. He says he is not opposed to States having authority to enact criminal sanctions against possession and against its use, but only at the Federal level, and cites as reasons for that the fact that marihuana is grown extensively in the United States. The great majority of marihuana that is used here is not grown in the United States, because, at the present time, there exist legal prohibitions against its growth, and this holds it down. Most of the marihuana which is used here is in the category of heroin and cocaine, which he mentions, and it is grown in other countries, and imported into this country in large quantities.

We believe marihuana should continue to be legally prohibited for a number of reasons.

Your staff, in discussion with us, asked us not to dwell on the medical properties of marihuana, and we do not intend to do that, but I think I cannot adequately express our position without reference to the medical characteristics of it.

Dr. Bourne states that there is to him no persuasive evidence that there is medical reason not to use marihuana. The American Medical Association disagrees. In comments made to a committee here in March of this year regarding decriminalization of marihuana, it was stated that in the opinion of the American Medical Association there is medical reason not to use it, and that it is medically harmful. Several other research projects have shown this also. This is one basis on which we urge that criminal prohibition against marihuana be continued.

The second reason has to do with our relationships with other organizations in other countries of the world. Because of our known position on this, I have been in dialogue in recent weeks with several law enforcement officials in other countries. They watch what we do here with great regard. People in Canada have talked to me about it, and they are greatly interested in the direction that we have taken in this regard. They are interested in the fact that we have considered decriminalization.

In 1961, we entered into an agreement with other countries regarding control of marihuana. We believe that the Federal decriminalization of marihuana would not violate perhaps the letter of that single convention, but would violate the spirit of it. Because the spirit of that convention very clearly calls for discouragement of the use of marihuana and even sets a distinct period of time—I recall 25 years as being the objective time in which use of marihuana would be ended.

Many of the nations which cooperate with us in the control of heroin and control of other drugs that are more addictive, and which are opposed by Dr. Bourne, look to us to maintain our position on marihuana in this country, because marihuana is a problem in their country. They feel that if we decriminalize marihuana here, then this removes a very major incentive on their part to cooperate with us in the control of other drugs which we consider to be a greater problem here.

You brought up in your questions the nature of the problem of alcoholism as it relates, in terms of numbers, to marihuana. There are known to be a many times greater number of alcoholics as there are drug addicts in this country. I submit to you, Senator, that a major part of that problem may be the legal availability of alcohol in this country, and the unavailability legally of marihuana and other drugs. I suggest to you tht if you legalize marihuana and decriminalize it, leave it to the States, and remove the Federal sanctions against its posseession and against its use, you are going to place it in the same category as alcohol. By its increased availability, you are going to promote its increased use. You are going to find it more closely approximating, in sheer volume, the problem that alcohol constitutes in this country now.

I think that what you do here is extremely important. I think that it is more than confirmation of a man, because what I think is at issue here is an ideology and a belief.

This committee, and I think the Senate as a whole, in confirmation of Dr. Bourne for this position would be adopting for itself a position that does favor decriminalization of marihuana. For that reason, I would urge you and other members of this committee not to approve the appointment of Dr. Bourne.

The CHAIRMAN. Aside from that one issue of decriminalization of marihuana, have you an appreciation for Dr. Bourne's professional competence?

Mr. KING. I do not question his medical training. I do not question the validity of his diplomas, and he may be totally competent to practice medicine anywhere, but I think his attitude in this regard is significant enough that it makes him an improper person to fill this office.

The CHAIRMAN. Let me ask you, from the international group you are familiar with, as executive director of the International Association of Chiefs of Police, what is the handling—of marihuana—in other nations, other Western countries, industrial countries, that you are closely associated with? What is the situation in Canada, Great Britain, France, on marihuana?

Mr. KING. On marihuana, there is still the legal prohibition against possession and use of marihuana. As I said, yesterday I talked with Government officials of Canada who knew I was going to be here today, and they expressed great interest in what we are doing. They realize that it impacts directly, and in a very real way upon what they are able to do in Canada.

I have talked with police representatives in other countries, particularly countries of the Middle East. Marihuana is their problem. The problem does not exist there to the degree that it exists here with the opiates and with the synthetic drugs, and things of this nature. The problem there is one of marihuana. It is significant to them in a very real way what we do about our approach to it.

The CHAIRMAN. How about Great Britain, France, Germany, Italy?

Mr. KING. In some of those countries I think there has been a move not only in the area of marihuana, but the drug problem generally, rather than correct it by continued legal sanctions, to approach it from the point of view of treatment of the disease after it has been contracted.

I know Great Britain had a heroin maintenance program that I am informed largely——

The CHAIRMAN. I am just talking about marihuana.

Mr. KING. Of the countries that you have named, I have not discussed the problem with them, and I honestly do not know.

The CHAIRMAN. I misunderstood. I thought there was some relationship to the other members of your association with the other countries watching the developments in this area, marihuana, and decriminalization of marihuana——

Mr. KING. There is. I have talked in the Middle East, and I have talked with some members from South America, and I have talked with Canada, but I have not been in contact with Great Britain, France, and Italy and those countries you mentioned.

The CHAIRMAN. Thank you very much, Mr. King.

Senator Hatch.

Senator HATCH. You have heard the testimony of Dr. Bourne that there is basically no greater physiological or psychiatric effect on the human being from using marihuana than there is from using cigarettes.

Do you agree with that statement?

Mr. KING. I do not agree that there is no greater psychological effect on the human being as a result of using marihuana than there is as a result of using cigarettes. I think it may even be proved that there are more deaths caused each year by smoking cigarettes than by smoking marihuana. The Surgeon General has said that cigarettes are a harmful substance, and efforts are being made to discourage their use. He also said that you do not know how many deaths are caused by alcoholism, because immediate cause of death can be something other than alcoholism.

I submit to you that the same is true in the use of marihuana. That the use of marihuana can be involved in some of the deaths that are attributed to heart failure, coronaries, and other things.

With respect to the psychological and medical aspects of it, I think there are studies that indicate that there is an effect upon the chemistry of the body as a result of the use of marihuana.

As I have said, the American Medical Association has, first in 1971 I think, adopted a position of opposing the use of marihuana, and citing physical harmful effects.

The CHAIRMAN. Now they are prescribing it for glaucoma control.

Mr. KING. I am not aware that it has been prescribed in any way.

The CHAIRMAN. They have suggested its possible use in the treatment of glaucoma as the only known possibility of medical usage of it.

Senator HATCH. I suspect we are going to have a great increase in glaucoma patients throughout America.

Mr. KING. Absolutely.

Senator HATCH. I think greater availability of it, I am convinced, will bring about greater use of it.

In your statement, which I found to be quite interesting, you said: "Prior to the enactment of new marihuana laws, the Los Angeles Police Department's marihuana seizures has declined steadily since 1971, when over 16,000 pounds were seized. In 1972 seizures totaled 15,000 pounds. In 1973, 11,000 pounds, and in 1974, 5,240 pounds."

So that the point you are making there—well, to continue on, you said:

> * * * during the second quarter of 1975, as passage of the decriminalizing legislation appeared likely, 1,119 pounds were seized. In the third quarter, after legislation was signed by the Governor, 1,382 pounds were seized.

So what you seem to be saying here is that if we crack down even harder on marihuana usage, that we will be able to maybe prevent an awful lot of misusage in society.

Mr. KING. In my own mind, I am sure we can.

Senator HATCH. Your statement seems to say instead of getting softer, and easier on the marihuana user, we ought to get tougher with it because of the detrimental effects it has on society.

Mr. KING. I think it is particularly important that the Federal Government does this. I think that the Federal Government, by advocating decriminalization of drugs that have, in my view, proven harmful effects, takes itself out of the role of leadership in the prevention of usage of harmful drugs.

I think with stronger Government support of this, progress can be made. I think it has been made in Los Angeles. I think the decreased seizures in Los Angeles were not a result of less effort on the part of the police, but were the result of less drugs there to seize. I think that efforts should begin to bring this under greater control.

Senator HATCH. I cite to you the Drug Abuse Council news release dated January 28, 1977. It is for immediate release. It is entitled "Marijuana Survey, State of Oregon."

It says, in its first paragraph, in the 3 years since Oregon became the first State to eliminate criminal penalties for the possession of an ounce or less of marihuana, the number of adults who have used marihuana has increased 5 percent, and the number who currently are using marihuana has increased 3 percent.

Do you agree with those types of figures?

Mr. KING. I think those figures are not incorrect, but I think they are misleading.

Senator HATCH. Tell me how you think they are misleading.

Mr. KING. Because that same report, I believe, states that in the age group of 18 to 29 years of age, and that is the age group which is most likely to use marihuana—above 30 years of age there is relatively low use of it—I think that report states that in the 18 to 29 age group, use of marihuana during that period of time increased, not 3 to 5 percent, but 35 percent.

Senator HATCH. That is pretty dramatic.

Mr. KING. Yes; it is.

Senator HATCH. You are convinced that if we decriminalize, as Dr. Bourne has stated, that we will have dramatic increases in the usage of marihuana throughout society?

Mr. KING. I believe we would.

Senator HATCH. You are not a medical doctor, or a psychiatrist, but you are executive director of the International Association of Chiefs of Police. Sometimes our policemen in society happen to be the best psychiatrists, and sometimes the worst, too.

Mr. KING. They are in the position of having to be in that role more often now.

Senator HATCH. That is right.

What effect do you think—I will ask you the same question I asked Dr. Bourne, I think you are an expert in this area, although you are not officially a psychiatrist—what effect do you think marihuana usage has had on the family unit in America, on the basic structure of the family unit in America?

Mr. KING. I think it has had an effect. This is one factor of many that has contributed to a deterioration of the family unit. There are many others. I think drug use within the family is a major problem. I also believe that there is a relationship between the use of marihuana and the tendency to use stronger and more addictive, and more obviously harmful drugs. I think marihuana has to be included as one of the problems, because it is a problem with so many of our youth.

Senator HATCH. You brought out that in Los Angeles, before the laws were changed, and strict enforcement was the case, use of marihuana was driven way down. As soon as the law was changed, there was an upward trend, which has continued to the present time.

Although it went down to 5,000 pounds in 1975, in 1976 the total Los Angeles area, combined law enforcement area, seized 75,438 pounds of marihuana—this is during 1976—as compared to 17,455 in 1975. That is for the total area.

Mr. KING. That is right. Those are figures that had been published by the sheriff of Los Angeles County.

Senator HATCH. Do you have any idea what percentage of, let us say, teenagers in our society use marihuana?

Mr. KING. Some studies have been made, Senator, that have shown a high percentage of teenagers have experienced with it, and some studies, I think, have shown that as high as 55 percent of the teenagers admitted having had, on one occasion, or more, some experience with marihuana.

Senator HATCH. Do you attribute marihuana usage to a breakdown in law enforcement, or to an increase in law enforcement difficulties among our teenage and other youth in society?

Mr. KING. I am sorry, I do not understand the question.

Senator HATCH. Do you feel marihuana has contributed to an increased delinquency among our youth in society?

Mr. KING. It has been a factor involved in it, yes, sir.

Senator HATCH. Tell us why.

Mr. KING. I think the use of marihuana very frequently, with the young people, is an act of defiance. I think it is a rebellion. I think it is a method by which the young person expresses his anger or his frustration, or his disregard.

I think that the same kind of mentality that leads into experimentation with marihuana—and with one use, I suspect would not have serious harm physically—leads into other stronger, more addictive drugs that can have harmful effects.

I think it simply is a part of the total experience that we are now having—total problems that we are having in maintaining balance.

Senator HATCH. As Dr. Bourne said, if I heard Dr. Bourne correctly, what he seemed to say was that I do not favor laxity with regard to pushers and traffickers. If I understood him correctly, I think he was saying we ought to be just as tough, if not tougher, toward those people.

With regard to the users, those who repetitively use, well, we should probably have criminal sanctions with regard to them.

With regard to excess of 1 ounce or more, that the Federal criminal law should apply there. And that the States should enforce, or should have whatever law they want with regard to whether or not the use of marihuana is a criminal activity.

Is there an aspect of those particular statements with which you disagree? And if so, why?

Mr. KING. I disagree with the major part of it. The statement that we oppose possession of marihuana in quantities greater than an ounce is misleading, because an ounce, unless you know something about marihuana, seems to be a very limited amount. However, an ounce of marihuana is a major amount, and it is adequate to make a large number of marihuana cigarettes.

My figures may be wrong, but I am not going to be far off. I think the average marihuana cigarette would have 3 to 5 grams of marihuana.

Senator HATCH. How many could you make out of an ounce?

Mr. KING. Well, you could perhaps make 100 cigarettes.

Senator HATCH. I see.

Mr. KING. There are 400 odd grams to an ounce. Five grams would be a fairly heavy marihuana cigarette.

Senator HATCH. Thank you. I appreciate your coming in.

Mr. KING. I also think that leaving it up to the States to suggest that it is a matter of insufficient importance to warrant Federal attention is an attitude that leads us down the primrose path. I think it is sufficiently important to warrant Federal attention and Federal leadership. I think we should not have a Drug Abuse Policy Office which suggests abdication of responsibility in this area.

Senator HATCH. Thank you. We appreciate your testimony here today.

The CHAIRMAN. Thank you, Mr. King.

Mr. KING. Thank you.

[The prepared statement of Mr. King follows:]

TESTIMONY

BY

GLEN D. KING
EXECUTIVE DIRECTOR
INTERNATIONAL ASSOCIATION OF CHIEFS OF POLICE
ELEVEN FIRSTFIELD ROAD
GAITHERSBURG, MARYLAND 20760

BEFORE THE

SENATE COMMITTEE ON HUMAN RESOURCES
Senator Harrison A. Williams, Jr., Chairman

Confirmation Hearing
Dr. Peter Bourne
Director
White House Office of Drug Abuse Policy

Room 4230
Dirksen Senate Office Building

FRIDAY, MAY 13, 1977

AS EXECUTIVE DIRECTOR OF THE INTERNATIONAL ASSOCIATION OF CHIEFS OF POLICE (IACP) -- A MEMBERSHIP ORGANIZATION OF POLICE EXECUTIVES WITH MORE THAN NINE THOUSAND DOMESTIC MEMBERS -- I CONVEY THE THANKS OF THOSE MEMBERS FOR THE OPPORTUNITY TO APPEAR BEFORE THIS COMMITTEE TO EXPRESS OUR VIEWS ON THE CONFIRMATION OF DR. PETER BOURNE TO SERVE AS DIRECTOR OF THE WHITE HOUSE OFFICE OF DRUG ABUSE POLICY.

OUR OPPOSITION TO THE CONFIRMATION OF DR. BOURNE IS NOT FOUNDED ON ANY PERSONAL OR ORGANIZATIONAL ANIMOSITY TOWARD HIM.

RATHER, IT IS BASED ON OUR FREQUENTLY EXPRESSED VIEW THAT DRUG ABUSE WILL BEST BE CONTROLLED IN THIS NATION IF POLICY FORMULATION IS UNDER A PERSON WHO ABIDES BY A STRINGENT

ENFORCEMENT PHILOSOPHY RATHER THAN A POLICY OF TOLERANCE THAT INCLUDES APPROVAL OF DECRIMINALIZATION OF CERTAIN SUBSTANCES.

THIS ASSOCIATION HAS, WITHOUT DEVIATION, STOOD FOR FAIR AND IMPARTIAL ADMINISTRATION OF THE LAW AND WILL CONTINUE TO DO SO.

WE ARE OPPOSED TO DECRIMINALIZATION OF MARIJUANA AND COCAINE AND, BASED ON CONTRARY POSITIONS ADOPTED BY THE NOMINEE, WE ARE COMPELLED TO MAKE KNOWN OUR OPPOSITION TO HIM.

OUR OPPOSITION TO DECRIMINALIZATION WAS SPELLED OUT IN DETAIL IN RECENT TESTIMONY BEFORE THE HOUSE SELECT COMMITTEE ON NARCOTICS ABUSE AND CONTROL.

EDWARD M. DAVIS, CHIEF OF POLICE OF LOS ANGELES AND PRESIDENT OF THE IACP, OBSERVED THAT AN INTENSE CAMPAIGN HAS BEEN WAGED OVER THE

PAST TEN YEARS TO CHANGE OUR MARIJUANA LAWS BASED LARGELY UPON THREE MAJOR POINTS:

1) THAT MARIJUANA AND ITS DERIVATIVES ARE ESSENTIALLY HARMLESS;

2) LEGAL AVAILABILITY OF MARIJUANA WOULD RESULT IN ONLY A SMALL MINORITY BECOMING USERS; AND

3) THAT LEGISLATION AND ENFORCEMENT TO CURB DRUG ABUSE IS INEFFECTIVE AND A WASTE OF THE TAXPAYERS' MONEY.

I DO NOT INTEND TO DISCUSS IN ANY DETAIL THE PROS AND CONS REGARDING THE MEDICAL PROPERTIES OF MARIJUANA.

MEDICAL RESEARCHERS OF APPROXIMATELY EQUAL PAPER CAPABILITY ARRIVE AFTER EXAMINATION AT DIAMETRICALLY OPPOSED POINTS OF VIEW -- SOME CLAIMING THAT ITS USE IS HARMLESS AND OTHERS THAT MAJOR HARM DOES OCCUR.

IT SEEMS TO ME THAT THE PREPONDERANCE OF RESEARCH HAS FOUND THAT THE USE OF MARIJUANA IS HARMFUL IN SOME DEGREE, AND NO RESEARCH TO MY KNOWLEDGE CLAIMS ANY MAJOR BENEFIT FROM ITS USE.

THE THREAT TO THE USER JUSTIFIES CONTINUED CONTROLS ON MARIJUANA UNTIL CLEAR AND UNCONTRADICTED EVIDENCE INDICATES THE DESIRABILITY OF THEIR REMOVAL.

THE SECOND MYTH IN THE PRO-MARIJUANA ARGUMENT IS THAT ONCE IT'S LEGALLY AVAILABLE ONLY A SMALL MINORITY WOULD BECOME USERS.

OUR EXPERIENCE HAS SHOWN US THAT WHEN DRUGS ARE READILY AVAILABLE THEIR USE INCREASES.

EXPERIENCES OF U. S. SERVICEMEN IN GERMANY AND VIET NAM, WHERE SUPPLY OF MARIJUANA AND OTHER DRUGS WERE PLENTIFUL AND CHEAP, AND IN

JAPAN, WHERE AMPHETAMINES WERE READILY AVAILABLE, POINTS TOWARD INCREASED USAGE BECAUSE OF INCREASED AVAILABILITY.

EXPERIENCE IN CALIFORNIA WHICH PRACTICALLY DECRIMINALIZED MARIJUANA IN 1976 DOES NOT SUPPORT THIS SECOND MYTH.

PRIOR TO THE ENACTMENT OF NEW MARIJUANA LAWS, THE LOS ANGELES POLICE DEPARTMENT'S MARIJUANA SEIZURES HAD DECLINED STEADILY SINCE 1971 WHEN OVER 16,000 POUNDS WERE SEIZED.

IN 1972, SEIZURES TOTALED 15,000 POUNDS; IN 1973 -- 11,000 POUNDS; AND IN 1974 -- 5,240 POUNDS.

DURING THE FIRST QUARTER OF 1975 -- AT THE SAME TIME NEW LEGISLATION ADVOCATING DECRIMINALIZATION CAME INTO VIEW -- ONLY 474 POUNDS WERE SEIZED.

DURING THE SECOND QUARTER OF 1975, AS PASSAGE OF THE DECRIMINALIZING LEGISLATION APPEARED LIKELY, 1,119 POUNDS WERE SEIZED.

IN THE THIRD QUARTER, AFTER THE LEGISLATION WAS SIGNED BY THE GOVERNOR, 1,382 POUNDS WERE SEIZED.

AND, DURING THE FOURTH QUARTER, MORE THAN 2,000 POUNDS CAME INTO POLICE CUSTODY -- BRINGING THE 1975 TOTAL TO 4,990 POUNDS.

THE FIRST QUARTER OF 1976 -- THE FIRST PERIOD UNDER THE NEW MARIJUANA LAWS -- SEIZURES SKY-ROCKETED TO OVER 3,000 POUNDS, A 539 PER CENT INCREASE OVER THE FIRST QUARTER OF 1975.

THAT UPWARD TREND CONTINUES TO THE PRESENT TIME AND, DURING 1976 -- THE FIRST YEAR UNDER THE NEW LAW -- THE LOS ANGELES POLICE DEPARTMENT SEIZED ALMOST 18,000 POUNDS OF MARIJUANA.

IN THE TOTAL LOS ANGELES AREA, COMBINED LAW ENFORCEMENT AGENCIES SEIZED 75,438 POUNDS OF MARIJUANA DURING 1976 AS COMPARED TO 17,455 POUNDS IN 1975.

SIMPLE LOGIC PERSUADES US THAT THE EXISTENCE OF MARIJUANA IN SUCH GREATLY INCREASED QUANTITIES MUST BE RELATED TO ITS INCREASED USE UNDER THE MORE PERMISSIVE LEGISLATION.

THE EXPERIENCE OF OTHER COUNTRIES, AS WELL AS OUR OWN, HAS BEEN THAT THE YOUTH AND YOUNG ADULTS ARE THE MOST VULNERABLE TO MARIJUANA USE.

RECENT POLLS HAVE SHOWN THAT 55 PER CENT OF THE 1976 HIGH SCHOOL GRADUATING SENIORS HAVE EXPERIMENTED WITH MARIJUANA.

THAT PERCENTAGE HAS GROWN YEARLY, AIDED WITHOUT QUESTION BY THE NORMAL IMPRESSIONABILITY AND REBELLIOUSNESS OF ADOLESCENCE, BUT ABETTED ALSO BY SO-CALLED RESPONSIBLE ADULTS WHO

RECOGNIZE THE DANGERS BUT WHO ARE EITHER UNWILLING OR AFRAID TO TAKE A STAND.

THE THIRD BASIS UPON WHICH MARIJUANA ADVOCATES RELY IN THEIR EFFORTS TO DECRIMINALIZE IS EQUALLY FALLACIOUS.

MARIJUANA ADVOCATES ADMIT AMONG THEMSELVES AND IN THEIR PUBLICATIONS THAT DECRIMINALIZATION IS JUST A STEP IN THEIR EFFORTS TO FULLY LEGALIZE MARIJUANA.

LAWS AGAINST SIMPLE POSSESSION GO FIRST; NEXT THE PENALTIES FOR CULTIVATION; THEN MARIJUANA IS ALLOWED TO BE PRESCRIBED FOR MEDICAL USE.

ALL OF THESE ARE STEPS TO LEGITIMIZING THE DRUG.

LAW ENFORCEMENT ALSO UNDERSTANDS THIS "CAMEL'S HEAD IN THE TENT" APPROACH AND SEES MARIJUANA AS BEING ONLY THE FIRST OF THE CONTROLLED SUBSTANCES TO COME UNDER ATTACK.

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ALREADY ARGUMENTS ARE BEING HEARD FOR LEGALIZING COCAINE.

THEY BEGIN BY SAYING THAT COCAINE IS REALLY HARMLESS WHICH HAS A VAGUELY FAMILIAR SOUND.

I REALIZE THAT THE PURPOSE OF THIS HEARING IS NOT TO DETERMINE WHETHER MARIJUANA AND OTHER CONTROLLED SUBSTANCES SHOULD BE DECRIMINALIZED.

HOWEVER, OUR OPPOSITION TO THE APPOINTMENT OF DR. BOURNE AS DIRECTOR OF THE WHITE HOUSE OFFICE OF DRUG ABUSE POLICY IS BASED IN LARGE MEASURE BECAUSE OF HIS ADVOCACY OF DECRIMINALIZATION OF MARIJUANA ON A STATE-BY-STATE BASIS.

BECAUSE OF HIS BELIEFS, THE ENTIRE ISSUE OF DECRIMINALIZATION AND LEGALIZATION BECOMES PERTINENT TO THESE HEARINGS.

WHEN REMINDED OF THE 1961 SINGLE CONVENTION TREATY, OF WHICH THE UNITED STATES IS A SIGNATOR

AND WHICH COMMITS 104 NATIONS TO DO EVERYTHING LEGALLY POSSIBLE TO CURTAIL THE AVAILABILITY AND USE OF CANNABIS, DR. BOURNE STATED THAT A FEDERAL STRATEGY OF DECRIMINALIZATION WOULD BE A VIOLATION OF THE TREATY, BUT STATE-BY-STATE PROGRAMS DO NOT VIOLATE THE TREATY.

HOWEVER, THE TREATY SETS AS ITS GOAL THE ELIMINATION OF THE USE OF CANNABIS IN MEMBER COUNTRIES OVER A TWENTY-FIVE YEAR PERIOD, HOPING TO DO THIS BY EDUCATION AND LEGISLATION. (ART. 28, PAR. 1; ART. 49, PAR. 2(f).)

ADDITIONALLY, THE WORLD HEALTH ORGANIZATION HAS STRONGLY RECOMMENDED THAT NO COUNTRY WHERE MARIJUANA IS NOW ILLEGAL SHOULD CHANGE THE STATUS OF THE DRUG.

TO HAVE ENTERED INTO THIS TREATY ONLY TO RENEGE ON ITS ENFORCEMENT WOULD PUT THE UNITED STATES IN AN UNDESIRABLE POSITION.

RENEGING ON ITS ENFORCEMENT, HOWEVER, IS JUST WHAT DR. BOURNE IS ADVOCATING WHEN HE SPEAKS OF DECRIMINALIZATION.

WE VIEW DR. BOURNE'S APPROACH OF DECRIMINALIZING MARIJUANA ON A STATE-BY-STATE BASIS JUST AS SERIOUS AS THE DEVELOPMENT OF A UNITED STATES DECRIMINALIZATION PROGRAM, AND WE DO NOT FEEL, IN A TIME WHEN DRUG ABUSE IS TAKING SUCH A HEAVY TOLL IN HUMAN SUFFERING, THAT A LAX APPROACH TO THE PROBLEM IS IN THE BEST INTEREST OF THIS OR ANY OTHER NATION.

THERE IS A DEFINITE LINK BETWEEN OUR MARIJUANA POLICY AND OTHER DRUG ABUSE POLICY WHICH DR. BOURNE HAS NOT ADDRESSED.

THE IMPORTANCE OF THIS LINK WAS EMPHASIZED IN A STATEMENT BY MR. JOHN BARTELS, FORMER ADMINISTRATOR OF THE U. S. DRUG ENFORCEMENT ADMINISTRATION, IN 1975:

THAT LINK IS THE IMPACT THAT U. S. POLICIES TOWARD MARIJUANA HAVE ON THE WILLINGNESS OF FOREIGN GOVERNMENTS TO ASSIST U. S. NARCOTICS SUPPRESSION EFFORTS OVERSEAS.... MANY FOREIGN SOURCE COUNTRIES REGARD MARIJUANA USE AS A PROBLEM THAT IS MORE SERIOUS TO THEM THAN HEROIN OR COCAINE USE. THEY WOULD REGARD A WEAKENING OF THE U. S. POLICY TOWARD MARIJUANA USE AS A SIGN OF BAD FAITH OR INSENSITIVITY TO THEIR DRUG PROBLEM. AS A RESULT, THEIR ENTHUSIASM FOR HELPING THE U. S. WITH ITS DRUG PROBLEM WOULD LIKELY LESSEN.... IF WE DO NOT CONTINUE TO HAVE AND ENFORCE LAWS AGAINST MARIJUANA USE, THE COOPERATION WE CAN EXPECT FROM FOREIGN GOVERNMENTS IN HELPING US WITH OUR TOTAL DRUG PROBLEM WILL BE SIGNIFICANTLY REDUCED.

I WOULD OFFER THAT CONFIRMATION OF A PERSON WHO ADVOCATES DECRIMINALIZATION OF MARIJUANA, AT ANY LEVEL, WITHOUT CONSIDERING INTERNATIONAL IMPLICATIONS, SHOULD NOT BE PLACED IN A POSITION OF DEVELOPING NATIONAL POLICY.

MUCH HAS BEEN SPOKEN AND WRITTEN ABOUT A RETURN TO GOVERNMENT MORALITY AND LEADERSHIP QUALITIES THAT WE WOULD WANT OUR YOUTH TO EMULATE OVER THE COMING YEARS.

A LACKADAISICAL AND OPEN POSTURE ON DECRIMINALIZATION OF SUBSTANCES THAT ARE DANGEROUS DOES NOT PROVIDE THAT TYPE OF LEADERSHIP QUALITY IN THE ESTIMATION OF THE INTERNATIONAL ASSOCIATION OF CHIEFS OF POLICE.

WE BELIEVE THAT THE PERSON DIRECTLY RESPONSIBLE FOR FORMULATING THE POLICY DIRECTING THE FIGHT AGAINST DRUG ABUSE IN THIS NATION SHOULD HAVE AS A FIRST PRIORITY THE FULL ENFORCEMENT OF LAWS

PERTAINING TO THE SALE AND USE OF ALL NARCOTICS, INCLUDING MARIJUANA AND COCAINE.

THE IACP DOES NOT CHALLENGE THE RIGHT OF STATES TO DECRIMINALIZE MARIJUANA, COCAINE OR ANY OTHER SUBSTANCE.

WE DO, HOWEVER, QUESTION THE ADVISABILITY OF SUCH ACTION, AND WE STRONGLY QUESTION THE PROPRIETY OF THE DIRECTOR OF THE OFFICE OF DRUG ABUSE POLICY APPROVING OF SUCH ACTION.

AT A RECENT MEETING OF THE NATIONAL ORGANIZATION FOR THE REFORM OF MARIJUANA LAWS (NORML), DR. BOURNE WAS QUOTED AS CRITICIZING FEDERAL DRUG ABUSE POLICY OVER THE PAST FIFTY YEARS.

HE PREFACED HIS REMARKS BY STATING THAT HE WAS REPRESENTING HIMSELF, NOT THE CARTER ADMINISTRATION.

WE DO NOT FEEL THAT A MAN SO CLOSELY ASSOCIATED WITH AN ADMINISTRATION CAN SEPARATE HIS PERSONAL LEANINGS FROM HIS PROFESSIONAL RESPONSIBILITIES.

THE IACP IS NOT ADVOCATING A "HANGING JUDGE" APPROACH.

WE FEEL STRONGLY THAT THE PERSON WHO GUIDES OUR NATIONAL POLICY ON DRUG PROBLEMS AND THE RESOLUTION OF THE PROBLEMS SHOULD STRONGLY OPPOSE DECRIMINALIZATION AND SHOULD BE IDENTIFIED AS FAVORING CLOSE TIES WITH LAW ENFORCEMENT IN ALLEVIATING THE PROBLEM OF DRUG ABUSE.

AND, I MIGHT ADD, THIS PROBLEM OF WHICH WE SPEAK KNOWS NO SOCIOLOGICAL OR ECONOMIC BOUNDARIES AND IS AS SERIOUS A NATIONAL PROBLEM AS ENERGY OR UNEMPLOYMENT.

WE MUST SET AN EXAMPLE FOR NOT ONLY THE YOUTH OF OUR NATION, BUT FOR THE LEADERS OF OTHER COUNTRIES.

WE CAN ONLY DO IT BY TAKING THE HARD-LINE APPROACH.

WE CANNOT DO IT THROUGH LENIENCY.

FOR THESE REASONS, THE IACP OPPOSES THE CONFIRMATION OF DR. BOURNE AND HOPES THAT ITS VIEWS WILL BE ACCEPTED IN THE SPIRIT IN WHICH THEY ARE OFFERED, SPECIFICALLY FOR THE THOUSANDS OF LAW ENFORCEMENT PERSONNEL IN THIS AND OTHER NATIONS WHO MUST DEAL DIRECTLY WITH THE TERRIBLE AND SOMETIMES DEADLY PROBLEM OF DRUG ABUSE.

The CHAIRMAN. Our next witness is Dr. Rosinsky, research and development staff of U.S. Labor Party.

Dr. Rosinsky, we are looking forward to your testimony.

STATEMENT OF DR. NED ROSINSKY, BIOMEDICAL RESEARCH DIVISION, U.S. LABOR PARTY

Dr. ROSINSKY. It is a pleasure to be here.

I would first like to comment on Mr. King's testimony, which I think is very relevant and very explicit.

Mr. King covered some of the issues I intend to speak about.

Since the question of medical competence did come up, I understand we are not here to discuss, as a focused issue, actual effects of marihuana, but I do think this is one of the most important issues being raised, and the issues here are being raised.

I would like to mention a few things about the drug itself in relation to certain statements——

Senator HATCH. Would you mind speaking up? We are not hearing you.

Dr. ROSINSKY. I have here a number of quotes that have appeared in a number of newspapers and journals, quotes by Dr. Bourne. I will not go through all these now, as I think Senator Hatch has referenced some of them.

I would like to point out one, though, in a journal called Drug Review, which is published in January 1976. This is a signed article by him.

He says:

> The decriminalization of marihuana is now publicly supported by most Federal officials, particularly outside the Drug Enforcement Administration, but apparently only because it is an approach that has wide acceptance throughout the country and has been made a reality in a half dozen States. This is curious in light of the fact that the Government funded extensive studies on cannabis, published many reports, had all the facts in hand, and was in the best position to take the progressive policy step supporting decriminalization. It cannot be argued that they felt such a policy was wrong, because they are now supporting it, but only after others provided the leadership.
>
> Similarly, the Government defined drug abuse in America as essentially a heroin problem until strong outside pressure forced some focus on the polydrug issue. Now the White Paper accurately recognizes what those outside the Government have been saying for a long time: "That the war on drugs" cannot be "won" and the strategy pursuing it is just not working.
>
> But for an alternative, one feels that the Federal drug officials are waiting for someone to tell them what to do. The possibility of heroin maintenance, or even heroin decriminalization, is now being talked about actively again, but not in the Government.

I am sorry the quote was so long. This is quite frequently the way that Dr. Bourne expresses his opinions.

It is clear from the context what he is talking about. He is waiting for States and other sources to concur on what he claims to be a really existing feeling among Government officials, that heroin decriminalization is fine, and he equates that with marihuana decriminalization.

I have a number of other quotes. I will not go through all of them, I will introduce them into the record. I have an actual quote from Dr. Bourne, when he was one of the keynote speakers for the last NORML Conference, that is, the National Organization to Reform Marihuana Laws.

He graced the conference by being one of the keynote speakers, and he, in regard to the heroin problem—I will give you a little bit of this—this is from the International Journal of Drug and Alcohol Dependence, volume 1, No. 1, February 1977. This is what they say about him.

> He also called for a more rational approach to the heroin problem, emphasing that "we don't want to see it more widely used."
> He praised the recent League of Cities discussion of the decriminalization of heroin with the possible development of heroin maintenance centers.
> He said it was encouraging "that people are looking at treatment potential. There is now a willingness to do research to see if a drug has something to offer."

How much research do we have to do to know whether something has something to offer?

We have had experience with this drug for quite a while. We know its destructive effects. We know the effect of having prominent a spokesman who is known for being close to the President, being a Presidential adviser, has an office in the White House, and when that fellow comes out and says maybe we should think about decriminalizing heroin, maybe we should look at the issue, that has phenomenal effect on public policy and public opinion. He knows that we all know that.

I wish he would be more honest, and come out and say exactly what he feels. But this probably has greater impact on public sentiment, than if he did so.

I have, as I said, more quotes. This fellow has been quoted very frequently in a number of different publications.

I think one of the most telling quotes by him was actually something that he actually said in the select committee hearings, in Lester Wolff's Select Committee on Drug Abuse, on March 14 of this year in the House, where he gave the official administration policy. He was a speaker on the marihuana problems, and under questioning, the issue of the Oregon study did come up.

Somebody said, well, what does the study mean? It seems that the study indicates that more people are now using marihuana after decriminalization. He brushed it off by saying it was just a marginal increase, a few percent, and we are still evaluating the study. It does not seem we can make much of it at this point.

Let me tell you what this few percent means, and clarify some disagreements you had with Mr. King over what the figures were.

There were two questionnaires sent out to over 800 people, and this was commissioned by the Drug Abuse Council. It found that people smoking marihuana had increased between 1975 and 1976 by approximately 33 percent, or 34 percent. The rate in the overall population increased from 9 percent, this is the entire population, to 12 percent of the entire population.

In other words, 3 percent figure was 3 percent of the entire Oregon population, not 3 percent of the original marihuana smoking section of the population, which is a small section.

When you have 35 percent, the increase of the previous marihuana population, added on to it the following year—well, anybody reading that study knows exactly what those numbers mean, and anybody who gets up and makes a public statement that there was a marginal

increase, a few percent increase, in smoking, is either a total incompetent, not able to read a report, or else is deliberately misleading the public.

It was not a few percent decrease in marihuana smoking population, if you take that 3 percent and extrapolate it to the entire country, it may or may not be a valid thing to do, but it gives you the idea of the magnitude of what we are talking about, over 200 million people, and 3 percent is 6 million people. Six million more marihuana smokers between 1975 and 1976, in 1 year.

All right. It is probably still going on up. This is the kind of misleading statements which are coming out.

The same statement was quoted concerning a marginal increase, and a few percent is quoted in the reports on the Governors' conference, and the recent Governors' conference to which Mr. Bourne was an advisor, and made reference in the beginning.

There is a question of competence involved here. It is a question of plain old honesty in presenting the facts.

In terms of competence, I know we are short on time, and so few witnesses, and I think it is a scandal that we are so short on time. I think many issues should be raised.

One thing which I think I have the capacity to speak about is the medical aspect, and I would like to bring up one medical fact, among many, and I have sent him memos on this.

Dr. Robert Heath, head of the department of psychiatry and neurology at Tulane University, has been experimenting with rhesus monkeys for years, and giving them small amounts of marihuana, or the equivalent of one marihuana cigarette per day for a period of about 3 months—gives them the equivalent of one marihuana cigarette per day for 3 months—and has been doing experiments on the brainwave analysis from these monkeys.

What he found was that in the deep parts of the brain an area called the lymphic system there are severe pathological changes in the brainwaves of these monkeys after 3 months of marihuana.

After they stopped marihuana, the brainwaves apparently are still pathologically changed. This has been known for several years. It is in medical literature. It has not been disproven.

More recent results, which have not been published, but we have circulated, that Dr. Heath has sacrificed some of those rhesus monkeys, and cut up the brains, and looked at the brains, under a microscope, and shows precisely that area with the brainwaves, and he has found pathological changes, which you can see under a microscope. These are severe changes which you see with degenerative brain disease, or severe vitamin deficiencies on which you have psychosis induced kinds of things, and this is in the process of being printed.

We have received preliminary copies of this. I am circulating this widely to all people who are concerned with this, including Dr. Bourne.

The statement, to the contrary, that human beings' brains are not likely to be damaged, is a misleading statement, because with humans you cannot stick needles in the brain and test the brainwaves. You cannot analyze the brain to see if there is brain damage.

All you can do is use surface electrodes on the brain, or scalp. In those cases they have found them to be normal brainwaves, but so have they with the monkeys.

The normal experiment would be to run a series of tests on humans who have been killed in car accidents, or something like that, take a complete drug history, do thorough autopsy and samples around the country, and find out if they have pathological findings under a microscope in those areas.

It is possible for this to be done.

So this could be done, if it were Government policy. I would like to put this actually in the proper context in which we are talking about.

We have to look at what is reality at this point in the international economic and political situation. The country is facing one of the most severe crises it has ever faced. There is large scale unemployment, there is large scale social dislocation, which far outstripped the 1960's student movement.

The 1960's student movement, in which we saw a lot of youth dislocation, is completely dwarfed by what we have now with unemployment, with inflation, with confrontation, breakdown in SALT talks, and so on.

In that context, there is a tendency to take drugs. And I am not just talking about our young; I am talking about our skilled workers and scientific work force.

We know that drugs now are running rampant through the plants, heroin, marihuana, and everything else. At this point, this is about the worst time in the history of the United States to decriminalize drugs, because there is such a strong tendency to take them now—and as I said, again, by the adult population as well as the student population.

The policy of decriminalization is an extremely unpopular policy. Carter has apparently done a full sweep with unpopular policies, beginning with his energy programs, with the energy cutbacks, the dismantling of advanced scientific experimentation between fusion energy and the issue of dissidence in the Soviet Union and the breakdown of the SALT talks.

And the reason I bring these matters up here is because of the relevance of the smoking of marihuana to the possible fostering of acceptance of a very unpopular domestic and industry and labor policy.

Carter is faced with massive opposition to the cutbacks in energy; massive opposition to his cutbacks in plutonium recycling, internationally; massive opposition in his creation of CCC-type cheap labor, Government-funded labor, rather than highly skilled labor, rather than increasing production and increasing technology; massive opposition from the scientific community on his cutbacks in particular nuclear energy, and in basic research in physics, as well as biology.

He will have a very tough fight with this. We already have 10 million people supposedly smoking marihuana on a rather frequent basis. If this goes up to 20 or 30 million people, you could get any program through; nobody would care; there will be no opposition.

And I will tell you, the first thing that goes when you get "stoned-out" on marihuana, the first thing that goes when you take any drug, is your ability to conceptualize and act in a political way, on a comprehensive solution to the very difficult problems that we are facing internationally. It is impossible for someone who is a frequent mari-

huana smoker to engage in any kind of intelligent, large-scale, comprehensive political activity. They may be able to join NORML and go after one narrow issue, or a women's right issue, or a minority issue, or whatever, but there is absolutely no way that a person could take responsibility for the general political situation——

Senator HATCH. Well, Doctor, that might be beneficial to society, if we would have these people just go after one issue.

Dr. ROSINSKY. I'm sorry?

Senator HATCH. I am just being facetious. But to make a point that I think both Senator Williams and I both feel very strongly about, if you have information, because of the shortness of time, that you would like to submit in addition to this, we would certainly like to have it.

That will give you the opportunity of submitting more than just your statement, if you desire. But I think we only have about 10 minutes left.

I do not mean to cut you off. But I have to leave in a few minutes, and I do not want you to feel that I am leaving during your testimony.

Dr. ROSINSKY. Are there any questions, then, before you leave? I can summarize now, if you want.

I was going to also mention that Dr. Bourne has been involved in the past in the Haight-Ashbury Free Medical Clinic, which was where Charles Manson got his treatments. He was also involved in setting up the Vietnam Veterans Against the War, with a couple of fellows who are now running a campuswide magazine.

He has been intimately involved—after coming back from Vietnam and winning a series of medals for his advancing the U.S. military position and representing his country, he comes back, and inside of several months, becomes the hero of what we call the counterculture. It was a very striking, very rapid shift, and it is very difficult to accept that as an honest shift. There are lots of suspicious, un-understandable things that I find about his past history, which require investigation before anybody confirms him, both because of his medical competence and because of his character.

Senator HATCH. Thank you.

The CHAIRMAN. Thank you, Doctor.

Where do you practice, Doctor?

Dr. ROSINSKY. In New York City.

The CHAIRMAN. Thank you, Doctor, very much.

Dr. ROSINSKY. You are welcome. I have my testimony here, and I also have several articles which I would like to introduce into the record.

The CHAIRMAN. They will be included.

Dr. ROSINSKY. Thank you.

[The prepared testimony of Dr. Rosinsky and material referred to follows:]

US Labor Party Testimony on Nomination of Peter Bourne for Director of the Office of Drug Abuse Policy

Submitted to the Senate Subcommittee on Narcotics and Alcohol Abuse
May 13, 1977
By Dr. Ned Rosinsky
US Labor Party Biomedical Research Division

The policies espoused by Dr. Peter Bourne represent one of the vilest threats to the national security and well-being of the American people. Bourne, in an article entitled "Leadership and Drug Abuse" in the January issue of Drug Review— a publication that claims to report on research, education, and treatment —proposed that "leadership" be provided for heroin decriminalization based on "the success of the National Organization for the Reform of Marijuana Laws (NORML) which made (marijuana decriminalization —ed.) acceptable and largely non-controversial."

Bourne said, "One feels that federal drug officials are waiting for someone to tell them what to do. The possibility of heroin maintenance or even heroin decriminalization is now being talked about actively again, but not in the government." To appear distanced from the issue himself Bourne adds, "The decriminalization of marijuana is now publicly supported by most federal officials, particularly outside the Drug Enforcement Administration, but apparently only because it is an approach that has wide acceptance throughout the country and has been made a reality in a half-dozen states." Bourne then argues for the government to take a leading role in heroin decriminalization saying, "This is curious . . . the government . . . had all the facts in hand and was in the best position to take the progressive policy step supporting decriminalization."He has openly stated the heroin addiction, methadone addiction, in fact, *any addiction* to a drug is not per se detrimental to either the individual addict or the society in which he lives. With this, Dr. Bourne demonstrates both his medical and moral incompetence to hold the position as the nation's single most influential coordinator of the policies on drug addiction, abuse rehabilitation and drug enforcement.

The unrestrained availability and proliferation of drugs can only result in corroding the moral fiber of our society — replacing the sense of individual and national purpose with an escape to stupefying fantasy. Two principal national security threats arise from this fundamental effect: the first is an immediate threat to the armed forces. In the face of drug proliferation in the society, as the Vietnam experience indicates, the Armed Forces cannot prevent widespread drug use, and even addiction among their ranks. Secondly, drug use and trafficking is a fundamental *modus operandi* for the development and activity of terrorist groups in the United States, beginning with the transformation of alienated anarchist students like Mark Rudd and Bernadine Dohrn into the terrorist killers of the Weather Underground with the help of marijuana and LSD. Congressional investigations have already documented the involvement of Cuban exile terrorists and the Mexican "23rd of September League" in trafficking guns for drugs in their assassination operations.

The title of the parent committee with jurisdiction over these hearings — *Human Resources* — bears most directly on the issue of Dr. Bourne's unfitness for his post. The labor power of the American skilled working force and its future generations including the scientists now being educated in American schools and universities is the most vital resource of our nation. Decriminalizing cocaine and marijuana as "recreational drugs" is antithetical to the continued development of the higher cognitive powers and skills of the American population.

The testimony before the Senate Internal Security Subcommittee on May 17, 1974, by Professor M.I. Soueif, Chairman of the Department of Psychology and Philosophy at Cairo University in Egypt is most relevant:

> "As to the relative magnitude of intellectual and psychomotor impairment associate with cannabis taking, we came recently to the conclusion that such impairment seems to vary in size according to the general level of pre-drug proficiency: the higher the initial level of proficiency, the bigger the amount of impairment (Soueif 1974; 1971). Those with a higher level of education — and-or intelligence — show the largest amount of deterioration; illiterates, almost no deterioration." (*1*)

This basic finding has never been refuted, not withstanding hastily prepared comparisons of academic grade levels of marijuana users and non-users, which

make no distinction between courses in "socially relevant" basket-weaving and actual scientific and humanistic disciplines. Governments of Third World countries like Egypt, India and Turkey have outlawed marijuana as a commitment to freeing their populations from drug addiction — a necessary condition for progress and industrialization. Only by abandoning the principle of scientific and technological development on which this nation was built, and standing by to watch the American skilled labor force sink to the social productivity levels of the most impoverished and backward cultures, can one justify the advocacy of drugging one's own population.

Trilateral "Arbeitdienst"

Bourne's total disregard for any criteria which define mental health and rehabilitation in a real sense of moral and scientific standards is his major asset in bringing into being the slave labor policies of the Carter administration. The logic is starkly laid out in "Methadone: Benefits and Shortcomings," a report prepared by Bourne for the Drug Abuse Council, a private Ford Foundation-created research outfit which specializes in studies condoning the legalization and government dissemination of marijuana, cocaine and morphine. Bourne has been a paid consultant for DAC for the past several years. DAC is the cornerstone of the drug decriminalization lobby, providing the pseudo-scientific backup for the National Organization for the Reform of Marijuana Laws (NORML).

On rehabilitation Bourne writes: "the accountability for a rehabilitation program extends only to restoring a person to whatever condition he was in prior to the development of his affliction." What sane human being, and particularly one who took an oath for the betterment of the human condition, would possibly argue that the degraded state at which an addict moves to a slow death in drugs is the goal of rehabilitation?"

On the merits of the drug maintenance system: "The nurse in the clinic has in fact become the surrogate for the street pusher; particularly for the older addict, this is a relatively easy transition to make... the methadone is obtained in the pleasant, accepting, supporting atmosphere of the clinic." This is the same argument made for the system of heroin maintenance by other Drug Abuse Council (DAC) experts. In fact, Bourne has gone on record for the viability of heroin maintenance on at least two occasions.

> "After we have (decriminalization) and after we have an ideal drug treatment program nationwide, then I can see having an experimental heroin maintenance program." (*2*)
> "This is really a radical proposal which is not politically acceptable at this time, but we may end up looking at something like a move toward worldwide decriminalization of the use of heroin." (*3*)

Once the U.S. government accepts as policy, as Peter Bourne has, that a psychoactive drug, with known harmful medical and psychological effects, administered to permanently addicted individuals is "not necessarily" deleterious, then it is simple to substitute heroin or morphine for methadone.

The history and nature of methadone bears directly in the broader motivation of drug criminals like Peter Bourne and the Trilateral Commission, who have made drug proliferation the first major leg of their domestic policy. Methadone was developed as a synthetic morphine substitute by Nazi doctors in Germany during the Hitler era. The applicability of methadone to maintain a zombie workforce in a perpetual state of passivity in which monotonous labor intensive tasks can be performed was perfected in the mid-1960s by the private institutions of the Rockefeller family — Rockefeller University and the Ford Foundation.

As the Carter administration moves toward the same Schachtian economic policies of Hitler Germany, energy conservation, replacement of capital-intensive with labor-intensive production, coal gasification, and Civilian Conservation Corps "Arbeitdienst" work camps, then the drugging of the workforce becomes a prerequisite for such economic policies.

Dr. Bourne's Record

While Dr. Bourne has recently tempered his pro-drug policy for the edification of law enforcement, Congress and other opposition, he is one of the prime movers of the decriminalization "movement," funded and created by monetarist private institutions like the Ford Foundation and the Institute for Policy Studies.

Bourne was a keynote speaker at the recent 5th Annual Conference of NORML, where he pledged his continuing personal support for that organization's drive. NORML is now leaning towards decriminalization of cocaine, legalization and home cultivation of marijuana. At the conference, Bourne also lauded a recent proposal by the National League of cities for heroin maintenance.

Leading in the praises for Bourne, are the newly created magazines devoted solely to drug use and traffic, *High Times* and *Head*. A summer issue of *High Times* (also a funder of NORML) reports a meeting between Bourne and NORML during the Democratic Party Convention in New York, where Bourne allegedly discussed a "White House Conference on Youth and Drugs" to be jointly run with NORML director, Keith Stroup. A *Head* editorial in February, 1977 suggests that Carter can end "the police state tactics of the Drug Enforcement Administration" by appointing Bourne as its director.

Bourne's connections to this network date back to his earliest medical experience after graduating from Emory University in 1963.

Bourne's first deployment was under MacGeorge Bundy, National Security Advisor at the time of the Vietnam War. In Vietnam the counterinsurgency methods of using large-scale drug addiction and black markets to control the civilian population were experimentally tested on a large scale. Bourne's specific job was to profile the Special Forces under aversive combat conditions for stress, an in-depth profile he later used in building the drug culture out of Haight-Ashbury in San Francisco where intelligence operatives of the CIA's Operation Artichoke had first tested their LSD experiments on "unwitting subjects."

According to Bourne's associate, DAC president Thomas Bryant, Bourne became an expert on international drug trafficking while in Vietnam. It would well serve the purposes of these hearings to discover whether this expertise involved participation in the infamous Golden Triangle drug running operation. The CIA's dummy corporation Air America and the Agency for International Development for which Bourne worked after returning from Vietnam are known to have had a hand in that operation.

While still serving as a consultant to the AID for Southeast Asian affair, Bourne became a celebrated anti-war activist, providing medical backup for the "leaked" scandals of the MyLai incident and the Pentagon papers. Bourne's role in "blowing" security secrets is the same role played by the founders of "CounterSpy" magazine — an intelligence operation — controlled by the Institute for Policy Studies.

In fact, Bourne founded the Maoist proto-terrorists, Vietnam Veterans Against the War (VVAW) whose co-founders include Tim Butz and K. Barton Osborne, both directors of the CounterSpy outfit. To entrench his reputation as anti-war leftist, Bourne testified for the defense at three of the most celebrated anti-war trials: Howard Levy's 1967 courtmartial for refusing to train Special Forces medics, the 1970 trial of Sgt. Esquiel Torres, a defendant in the MyLai killings, at which time Bourne was offered as a defense witness to establish that "killing civilians was the official policy of the U.S. government;" and the trial of Sgt. Jon M. Sweeney, charged with desertion and aiding the enemy, later acquitted.

At the same time, Bourne was working as a psychiatric staffer at the Haight-Ashbury Free Medical Clinic, established during the LSD epidemic of the late 1960s as crash pad and counseling center for the growing number of diseased and drug addicted youth during the Timothy Leary "Summer of Love" and subsequent violent decline of the counterculture myth. Ritual mass-murderer Charles Manson was one of the "ex-patients" of Dr. Bourne's clinic, but not the only case where the "pleasant, accepting, supportive atmosphere of the clinic," described by Bourne in his methadone report, failed to rescue its patients from psychosis. Dr. David Smith, Director of the clinic, then and now, presently serves as a Advisory Board member of NORML, stated recently, "With Peter, we have an open line (to the White House)."

In 1970, Bourne returned to Georgia where he became a close personal and political advisor to Jimmy Carter, assuming the post as Georgia health advisor when Carter became Governor. Under Carter, Bourne created the largest methadone maintenance system in the South. Simultaneously, Bourne served as a Director of the Institute for Southern Studies, the southern control point for Maoist and terrorist operations.

It has been reported that a known cocaine running network — the Allman brothers and Capricorn Records — are major funders of Carter electoral campaigns. *(4)* This committee must demand to know now if Dr. Bourne was aware, or had a hand in protecting Greg Allman and other members of that cocaine operation; and whether Carter's and Bourne's views on decriminalization of cocaine are in gratitude for the early campaign funding.

Science or Madness

In 1974 hearings held before the Senate Internal Security Committee on marijana use brought together the top international experts in marijuana research. The findings presented to the committee included: Evidence of massive damage to the entire cellular process in the human body. This includes reduction and inhibition of the DNA and RNA synthesis in the cell, reducing the rate at which cells reproduce. *(5)* Inhibition of the reproduction of T-lymphocytes, the cells involved in the immune process. *(6)* Destruction and damage of chromosomes in the human body. *(7)* THC (tetrahydracannibinol — the active ingredient in marijuana) and other marijuana products are fat-soluable substances which accumulate in the brain and gonads. The half-life of these marijuana products is eight days, that is, after eight days, 50 percent of the product is still in the body. *(8)* The basic inhibitory effect on DNA and RNA causes a sharp reduction in the rate of reproduction of male sperm cells. *(9)*

The effects on psychological processes is well documented in psychiatric literature and too lengthy to describe at this time. The work of Dr. Roy H. Hart, a Clinical Psychiatrist at Cornell Medical College, New York, N.Y. addresses the occurence of a marijuana psychosis, particularly among individuals with already existing neurosis and pre-psychotic conditions. *(10)*

With this existing evidence, Bourne's espousal of decriminalizing heroin, cocaine and marijuana is conscious destruction of the U.S. population. A policy which consciously fosters conditions that have *no other* effect than eroding the mental and moral fiber of the population is the quintessance of treason against the American Constitution. Bourne's counterinsurgency drug warfare is the re-embodiment of British colonial policy which created the 19th century Opium Wars against the Asian colonies, the same monetarist policy which Alexander Hamilton and the founding fathers condemned in framing a Constitution dedicated to the principles of progress and science.

The following action is therefore urgently recommended: that Peter Bourne be rejected for the post of Director of the Office of Drug Abuse policy, and that Congress strongly advise against his role in advising the president on issues of drug and health policy;

that a complete investigation into the connection between Carter and the Capricorn Records Atlanta-based drugrunning operation. Such a thorough investigation must result in the forthcoming indictments of the Institute for Policy Studies network behind the counterculture and community based "mental health" movement. The investigation must address Carter's own connection to such IPS terrorist controllers as Marcus Raskin; and

that Congress, in contradistinction to the drug policy espoused by the Carter Administration, initiate a program of international cooperation among the OECD countries, the Third World and the Comecon sector to eliminate criminal drug cultivation, trafficking and proliferation from the face of the globe.

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NOTES

1. "Marijuana-Hashish Epidemic and Its Impact on United States Security". Hearings Before the Senate Internal Security Subcommittee. May 9, 16, 17, 20, 21 and June 13, 1974 Testimony of Dr. M.I. Soueif (Referred to as: Senate Marijuana Hearings)

2. *Washington Star*, January 15, 1977, page 1.

3. *Skeptic Magazine*, Jan.—Feb. 1977.

4. "Carter Ties to Drug, Rock Culture Deep," *The Spotlight*, August 23, 1976.

5. Senate Marijuana Hearings, *Op. cit.*, Dr. Gabriel Nahas, Dr. Akira Morishima.

6. *Ibid.*

7. Stenchever, Morton A., M.D., et al. "Chromosone Breakage in Users of Marijuana", *American Journal of Obstetrics and Gynecology*, January 1, 1974.

8. Senate Marijuana Hearings, *op cit.*, Dr. Julius Axelrod.

9. Senate Marijuana Hearings, *op. cit.*, Dr. Robert Kiolodny, Prof. Cecile Leuchtenberger, Dr. John A.S. Hall.

10. Hart, Roy H., M.D. FAARN, "A Psychiatric Classification of Cannibis Intoxification," *Journal of the American Academy of Psychiatry and Neurology*, Vol. 1, No. 4, 1976.

DRUG REVIEW

○ RESEARCH ○ EDUCATION ○ TREATMENT ○

Vol. I No. 1 January 1976

Treatment $ Up, Training Down, in Proposed Budget

President Ford's budget recommendation to Congress for Fiscal 1977, scheduled for release Jan. 21, will include a $21 million increase in drug treatment funds, enough to allow the National Institute on Drug Abuse to add 7,000 new treatment slots to the Federally-funded treatment network, according to White House and HEW budget sources.

Drug abuse training programs would lose approximately $600,000, although a new emphasis is to be placed on *amphetamine and barbiturate treatment demonstration projects*. In addition, the proposed budget would also probably allow funds for a joint Department of Labor - HEW vocational rehabilitation demonstration program, the sources said.

The President is also recommending an increase of about $1 million for NIDA's prevention and education efforts.

The additional treatment slots, if they are approved or added to by Congress, would go a long way toward reducing the waiting lists that have been growing at selected treatment programs, and toward easing feelings of near desperation that are currently being expressed by some officials at NIDA.

One Institute official indicated that $20 million was a bottom-line figure, enough to handle "immediate needs." NIDA, he said, could (cont. on p.4)

INSIDE

LEADERSHIP AND DRUG ABUSE

By Peter G. Bourne, M.D.

While the recent report to the President from the Domestic Council Drug Abuse Task Force -- The White Paper on Drug Abuse -- did for the first time confirm in writing a number of policies which previously had existed only as understandings of good will from federal officials, it was generally criticized for failing to provide any new ideas or clear leadership.

Such criticism points up what appears to be a chronic government problem: the serious difficulty that the Federal drug abuse establishment seems to have in terms of new ideas in the field.

The question that needs to be asked, however, is whether this situation is inevitable by virtue of the nature of the federal government or whether it is something which could be changed.

The decriminalization of marijuana is now publicly supported by most federal officials, particularly outside The Drug Enforcement Administration, but apparently only because it is an approach that has wide acceptance throughout the country and has been made a reality in a half-dozen states. This is curious in light of the fact that the government funded extensive studies on cannabis, published many reports, had all the facts in hand and was in the best position to take the progressive policy step supporting decriminalization. It cannot be argued that they felt such a policy was wrong because they are now supporting it, but only after others provided the leadership.

Similarly, the government defined drug abuse in America as essentially a heroin problem until strong outside pressure forced some focus on the polydrug issue. Now the White Paper accurately recognizes what those outside the government have been saying for a long time: that the "war on drugs" cannot be "won" and the strategy pursuing it is just not working.

But for an alternative, one feels that federal drug officials are waiting for someone to tell them what to do. The possibility of heroin maintenance or even heroin decriminalization is now being talked about actively again, but not in the government. Changing the manner in which we handle heroin may not be a good idea, but it is the people in the federal government who should be talking about such issues as well as those in the field.

The problem stems from the unique role that drug abuse plays in the federal health policy, and the legal component that almost no other health problem has. For the treatment of heart disease, any new approach can be openly discussed with a minimum of controversy or political implication. Drug abuse unfortunately exists in a thick fabric of political concerns so that even what appears on the surface as a purely health or social issue has complex political ramifications.

Those setting policy in the drug abuse area are expected to operate in a vacuum, disallowed from participating in the broader political context on which their decisions impinge, but always hemmed in by it. The result is that it becomes almost impossible for anyone in the federal drug bureaucracy to take a strong position on a matter of policy until the way has already

been paved by public acceptance of that policy. Suggesting new or potentially controversial approaches or ideas carries almost no rewards, but a very great possibility for retribution.

Unlike other health areas, it is then particularly unrealistic to look for leadership on drug abuse issues in the federal government. Instead, it appears that new ideas and policy must come from outside the administration, thus providing an opportunity for federal policy makers to move.

The decriminalization of marijuana is perhaps the best example of this. Political constraints within the Administration made it extremely difficult to advocate such a position until the success of the National Organization for the Reform of Marijuana Laws (NORML) made it acceptable and largely non-controversial.

The key issue in the implementation of federal policy is money. Unstated policy can be made reality mainly by the manner in which money is spent. The massive infusion of money into treatment in 1971 was a statement of federal commitment to treatment. That at least a significant proportion of those funds went into methadone programs implied an endorsement of that approach at a time when it was still regarded as controversial by some federal authorities.

In the last two years, with a levelling off of federal funds, there has been little or no maneuvering room for creating new policy because the funds have been barely enough to maintain existing programs, let alone establish new or different ones. The result has been a certain stagnation in the one area where federal officials could establish policy in a somewhat covert manner without having to confront the politicians directly.

All of this means that more than ever the pressure for leadership, innovation, and new solutions for the drug problem lies outside the federal government. Private organizations including various special interest groups and associations now more than ever have an opportunity and an obligation to make themselves heard in determining where we are going to go with drug abuse in America.

[Dr. Bourne, the former Assistant Director of the White House Special Action Office for Drug Abuse Prevention, is currently a consultant on drug abuse and Visiting Lecturer at Yale University.]

HEROIN "MORE CASUAL AND LESS ADDICTING"

The National Institute on Drug Abuse now believes that there are "a hell of lot of people" who are able to use heroin without any adverse physiological or medical consequences, and without needing treatment, a NIDA official says.

The Institute estimates that between 3-4 million people in the U.S. have tried heroin, "suggesting" in the words of an early draft version of the Domestic Council Task Force report, "far more casual and recreational use than previously believed."

Those persons, the official contended, are probably no more "at risk" than individuals who have never experimented with the drug.

[] [] []

[From the Journal of Drug and Alcohol Dependance, Vol. 1, No. 1, February 1977]

Marijuana heads for the limelight

WASHINGTON, D.C. — A ...se aide to President Jimmy ...ter believes marijuana's ...ime has come."

"The issue which has been ...egarded as being on the ex...reme outside of the general ...ow of events now has moved ...o center stage," Dr. Peter ...urne told participants at ...e fifth annual NORML con...ence here.

...r. Bourne emphasized ...at he was presenting his ...n views.

"I don't know what he will ...for sure when he is in of...ce," he said.

But, he reminded that ...uring the campaign, Gov. ...ter had said he was in fa...r of decriminalization of ...rijuana.

"He said he felt President ...ter had this view because, ...Governor of Georgia, he ...d seen first hand what hap...ns to young people who are ...rced to spend years in ...ons, "where arrests for ...ession of small amounts ...marijuana destroyed the ...es of many young people."

At that time, Bourne continued, "he became very aware of the injustices and the inconsistencies in the present marijuana laws."

"At present, he favors leaving decriminalization to the states," he said. He thinks groups outside of the government ought to bring change."

Dr. Bourne reported that "the whole drug abuse field is of great interest to Carter." As Governor, he became "very knowledgeable" about the problem, "and I think he will maintain that interest as President, he predicted.

Too, he reminded, Mrs. Carter wants the appointment of a Presidential Commission on Mental Health. Such a Commission, he added, would include drug abuse and alcoholism.

"With that kind of interest at the White House level," he said, "the issues cannot be ignored.

"I think the next four years will see a change in the approach to these problems," he predicted.

Taking a look at current drug policy, Dr. Bourne noted that the roots are based in the 50-year-old policy of universal suppression of all drugs.

The two exceptions have been economic considerations — "if it looked like people could make a lot of money" — and the impossibility of controlling the use, he said, citing tobacco and alcohol as prime examples.

Drugs were much easier to control, he continued, particularly since usage was linked to already stigmatized minorities.

"Federal policies were never made on the basis of health hazards," he said. And changing attitudes have not been brought about because of health or medical reasons, but because of increasingly widespread use by a large segment of the population, he stated.

"Attitudes have been changed by reasoned, carefully-based factual exploration" and significant public education efforts by the government and private individuals, he noted.

"We need to continue a great emphasis on education," he continued, predicting "an important shift in federal policy in coming years to put great emphasis on all health education.

"But," he cautioned, "we still have a long way to go. Despite changes, thousands are in jail serving unjust sentences. It doesn't mean much that laws have changed. They need to be gotten out as rapidly as possible."

He also called for a more rational approach to the heroin problem, emphasizing that "we don't want to see it more widely used."

He praised the recent League of Cities discussion of decriminalization of heroin with the possible development of heroin maintenance centers.

He said it was encouraging "that people are looking at the positive aspects and at treatment potential. There is now a willingness to do research to see if a drug has something to offer."

"It is a slow change," Bourne concluded, "but I think we are moving in the right direction."

Peter Bourne

[From the Washington Star, January 1977]

IN FOCUS: Decriminalizing Drugs:

An Idea Whose Time Is Near

By Michael Satchell
Washington Star Staff Writer

Free heroin. Given away at government clinics. Junk from The Man. Just walk in, sign for it, go home, get your works, tie off, cook up, find a vein and take the hit. On the nod for three or four hours. Then [illegible] up [illegible] a friend maybe. Have a party.

None left? Simple. Back to the clinic and get more. No need to hustle. No need to steal [illegible] chump's TV, snatch a purse, boost a wristwatch or [illegible].

Shades of Clockwork Orange: a Jones that's a pleasure to satisfy. Fill your belly with food stamps and feed your arm with magic powder, courtesy of Uncle Sam. Tell the little man in the white coat to hit me again. Hey, brother. This is it.

This also isn't as far-fetched as it sounds. They call it heroin maintenance, and it's more than the dream of a junkie with empty [illegible] and a nagging belly [illegible], [illegible] the street on a [illegible] Monday.

Consider:

o The National League of Cities at its annual meeting in early December debated a motion to study the feasibility of providing heroin for addicts and removing criminal penalties for possession of all drugs. The motion was rejected, for this year.

o A San Diego grand jury, alarmed at the amount of crime spawned by the area's 3,[illegible] addicts, recommended last September that local addicts be supplied with heroin.

o Seven members of the Michigan House of Representatives introduced a bill to establish heroin maintenance programs throughout the state as a crime-fighting measure. Backers cited the [illegible] that [illegible] percent of all criminal acts in Michigan are drug-related. Legislators and officials in seven other states have publicly expressed interest in the idea this year.

o The Massachusetts Council of Churches, representing 15 Protestant [illegible] in the state, has suggested [illegible] that [illegible] for [illegible].

[illegible] Council. Recommending [illegible] of the [illegible] drugs [illegible] "[illegible] go a [illegible] reducing the social [illegible] penal system imposes on [illegible] others alike." That's on [illegible], anyway.

o At one time or another, such diverse institutions as the American Medical Association, the American Bar Association, the New York Academy of Medicine, a White House drug abuse committee, The Wall Street Journal, The New York Times and a number of drug abuse experts have called for a serious study or a pilot program for providing drugs for addicts.

Heroin maintenance represents the boldest gesture — or the ultimate cop-out — of an emerging philosophical approach as experts rethink traditional methods and seek new ways to fight drug abuse.

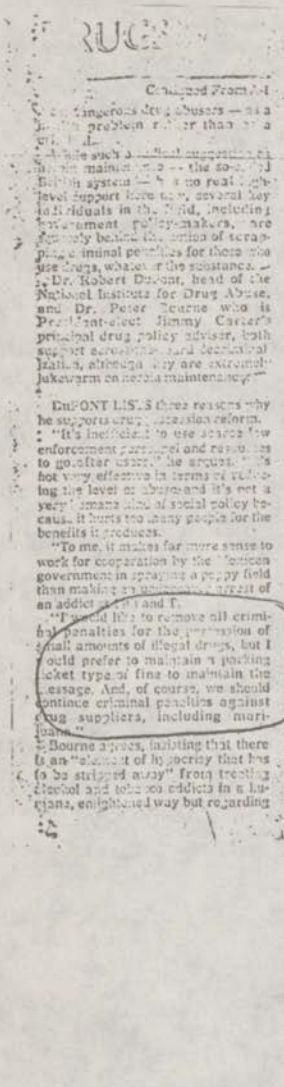
IN A NUTSHELL, arresting and prosecuting persons as a deterrent to using drugs simply doesn't work.

Last year, according to the government's annual "State of the Union" report on drug abuse, some 23 million Americans, about 1 in 8, used drugs other than alcohol.

Some 22 million people smoked pot, with 13 million forming a pool of regular smokers. Seven million abused prescription pills, mostly barbiturates and tranquilizers, with 3 to 4 million sniffing cocaine and up to 500,000 using heroin.

Obviously, the threat of arrest isn't discouraging many drug users. So why not concentrate on hunting down the suppliers, goes the new thinking. Better to treat the heroin, barbiturate or methadone addict — the

See DRUGS, A4



RUGS

Continued From A-1

dangerous drug abusers — as a health problem rather than a criminal ...

While such a ... approach ... maintained ... — the so-called ... system — is the real ... level support here ... several key individuals in the ... government ... are ... behind the notion of scrapping criminal penalties for those who use drugs, whatever the substance.

Dr. Robert DuPont, head of the National Institute for Drug Abuse, and Dr. Peter Bourne who is President-elect Jimmy Carter's principal drug policy adviser, both support ... and decriminalization ... although they are ... lukewarm on heroin maintenance.

DuPONT LISTS three reasons why he supports drug decriminalization.

"It's ineffective to use scarce law enforcement ... and resources to go after users," he argues. "It's not very effective in terms of reducing the level of abuse and it's not a very humane kind of social policy because it hurts too many people for the benefits it produces.

"To me, it makes far more sense to work for cooperation by the Mexican government in spraying a poppy field than making a ... arrest of an addict ... and I.

"I would like to remove all criminal penalties for the possession of small amounts of illegal drugs, but I would prefer to maintain a parking ticket type of fine to maintain the message. And, of course, we should continue criminal penalties against drug suppliers, including marijuana."

Bourne agrees, faulting that there is an "element of hypocrisy that has to be stripped away" from treating alcohol and tobacco addicts in a humane, enlightened way but regarding addicts of less socially ... drugs as moral transgressors.

"In the long run, I think the goal we want to strive toward is to perceive all substances of abuse in terms of their potential for damage, completely apart from any legal considerations," Bourne said.

"For example, look at the bizarre ... we treat cocaine. The penalty for ... cocaine is almost as severe as heroin, but you have to say the law has no bearing on cocaine, which causes few health or crime problems.

"The way we treat heroin addiction is comparable to the way we used to treat tuberculosis patients. They used to be stigmatized, locked up. It was very punitive. People were committed to sanitariums, but this has totally changed. We need to totally change the way we treat drug abusers.

"We have great compassion for the cigarette smoker who succumbs to lung cancer. We have much less compassion for the victim of heroin addiction. That doesn't make sense."

DRUG ABUSE, principally that of heroin and the pills which cause the bulk of the health and social problems, is expensive. The latest NIDA study pegs the annual cost at $10.3 billion in such areas as health resources, the criminal justice system, lost wages and crime, with some 3,000 heroin users dying each year from accident or overdose.

The crime spawned by heroin addicts — perhaps 20 percent of all burglaries, robberies and thefts in the nation according to one government estimate — is the principal spur for those who would like to see some kind of heroin maintenance program.

Overall, it is estimated, costs actually ... $5 to $8 billion annually.

While arrests and punishment have obviously failed to deter people from using drugs, drug treatment programs for addicts do work. By DuPont's reckoning, some $10 million in federal and local funds was spent ... drug addicts ... year ... the ... are arrested with some 250,000 people enrolled in methadone programs and 70,000 more in drug-free treatment.

"There are still some 600,000 heroin users who should be in treatment programs," the NIDA chief says. "If there aren't enough treatment slots, that's cheating for both the addicts, the clinics and the patients ... stigmatized, programs are ... funded and ... treated. It's hardly ... wonder that addicts aren't attracted to them."

WHILE decriminalization may be a necessary step toward a better, more enlightened approach to curbing drug abuse, accomplishing it won't be easy.

"One of the problems we have is the law enforcement community, where the desire to punish remains strong," DuPont notes. "In effect, the federal government has ... decriminalized marijuana ... because there are virtually ... federal arrests for ... abuse."

Added Bourne: "At the upper levels of enforcement, the DEA for example, people are ... very sophisticated. The problem with ... criminalization is getting it accepted at the lower echelon."

Interviews with key police officials in the District of Columbia and New York City underscored the ... views. Capt. Houston Higgins, ... the narcotics unit for the ... said:

"I wouldn't be opposed to ... making marijuana, but I'd ... be opposed to extending it to ... drugs. I definitely don't think we should make it legal to possess heroin. The way we get to the ... through the buyers, and decriminalization would hamper us ... dously."

Herman Reed, his counterpart with the New York Police Department, took an even harder ... voiced an opinion in ... heard from police officers ... with drug abuse on a daily ... level basis.

"It'll just gonna spread the cancer farther," Reed said. "I don't even support decriminalizing marijuana, never mind heroin."

The process of removing criminal penalties for drug possession has already begun in the United States with marijuana. Eight states to date have made pot possession of a small amount of pot to a civil fine, much like a traffic ticket, but that has been achieved only after a decade of work by the National Organization for the Reform of Marijuana Laws.

While there are virtually no federal arrests for simple pot possession, as DuPont points out, there were 416,900 pot offense arrests in 1975, over 50 percent of them for simple possession.

DECRIMINALIZATION bills will be introduced this coming session of Congress for the third time, but backers realistically see little chance for approval without a lead from the Carter administration. While recent surveys have shown widespread public indifference to the marijuana issue, pot is still a subject with an old taint and a pungent whiff that many lawmakers fear.

They would prefer the lead to come from the White House, but that, according to Bourne, is something Carter is not prepared to offer at this time.

"We (the Carter administration) have made a commitment toward marijuana decriminalization, but it isn't appropriate for us to take the lead," Bourne said, explaining that while Carter would sign a pot reform bill, he would not be prepared to ask Congress for one.

"NORML has done a spectacularly effective job, and I think it's appropriate for them to take the lead in this. There is no doubt that marijuana will be decriminalized in a few years. Then I'd like to see NORML switch its energies to working for lesser penalties for possessing other drugs rather than working for marijuana legalization."

Keith Stroup, NORML director, is understandably frustrated by having to continually take the lead and carry the drug reform burden and is puzzled over why lawmakers are taking so long to come to grips with it.

Evidence from some of the eight states where pot reform bills have been enacted shows big savings in police resources but with no apparent rise in the number of smokers.

The newest findings of a major California study, comparing the first six months of 1975 to the corresponding period in 1976 after pot was decriminalized, show these savings:

Police costs for marijuana offenses dropped from $76 million to $31 million and court costs went from $34 million to $2 million.

With the police freed to concentrate on hard narcotics, heroin crime arrests rose 43 percent during the same period, the California study showed.

Taken one step further, as Bourne and DuPont would like to see, decriminalizing all drug possession should mean a quantum leap in successful prosecution of drug sellers. But desirable as that goal may be, a tremendous amount of opposition remains.

"Without leadership from Carter, there is no way we can get a bill to him before 1979," Stroup says. "That is a hard, realistic goal."

So where does this leave the movement to decriminalize all drugs and explore heroin maintenance?

Said Bourne: "Decriminalization is a very important issue, and I want to tie it to a major effort at going at the traffickers. After we have it, after we have an ideal drug treatment program nationwide, then I'd see having an experimental heroin maintenance program."

HIGHWITNESS NEWS

Carter Camp Meets NORML

Top Carter aide-de-camp Dr. Peter G. Bourne, the British physician who heads up Carter's Washington office, has been meeting privately with Keith Stroup, director of the National Organization for the Reform of Marijuana Laws (NORML). The two are attempting to reach an agreement on what role Carter will play in NORML's bid to eliminate federal laws pertaining to personal possession of small amounts of marijuana.

The initial 20-minute meeting in New York's Statler Hilton during the Democratic National Convention in July was described by one observer as "an effort to make amends for the absence of a marijuana decriminalization plank in the Democratic Party platform." Carter has personally endorsed the decriminalization of possession of small amounts of marijuana to be decided upon by individual states.

Stroup, Bourne and New York State NORML Director Frank Fioramonti have been discussing the formation of a White House Conference on Youth and Drugs under the auspices of Bourne and NORML sometime next June.

Although no agreement has been reached, Bourne plans to continue talks with NORML representatives in Washington, where they will discuss the particulars of the proposed conference and the feasibility of Carter's assuming a leadership position in dope decrim if he is elected president. (See related story on page 44.)

Carrie Borzilleri

Long-time decrim advocate and top Carter aide, Dr. Peter G. Bourne, attended a preliminary meeting with NORML representatives during the Democratic National Convention in New York.

Jimmy Carter, shown here sporting the now defunct Allman Brothers (see story opposite) T-shirt, plans to solidify his association with the National Organization for the Reform of Marijuana Laws (NORML) through top adviser Peter G. Bourne.

Carter Appears in Macon

In a show of support to Capricorn Records, Democratic presidential candidate Jimmy Carter appeared at the fifth annual Capricorn Barbecue in Macon, the industrial southern town of 125,000 people in the heart of Georgia's peach belt.

The barbecue, held at Lakeside Park, brought together as many as 2,000 people from throughout the country and abroad and featured three Capricorn bands, including Sea Level, the band that evolved out of the breakup of the Allman Brothers.

Carter's appearance put to rest any speculation connecting him with Gregg Allman's testimony against John "Scooter" Herring. Previous speculation had asserted that Carter was instrumental in granting Gregg Allman immunity in return for testimony that led to 33 indictments in the Macon area.

"Carter was advised not to attend the outing," said one highly placed Carter aide, "but he rejected the idea that his appearance here today would be harmful to the campaign."

In response to questions about his association with Capricorn Records president Phil Walden, Carter said, "Phil means a lot to me, personally and politically. He has a good attitude toward the people of this country as expressed through his performing groups." Capricorn bands have given many concerts for Carter with gate proceeds going to the candidate. The proceeds are matched by a Federal Election Commission grant.

Amidst the afternoon barbecue of shredded pork, beans, fried chicken and carousel chicken, a local delicacy similar to hot curried chicken, Carter thanked Walden for his support. The candidate was later photographed alongside Walden as he was presented Billboard magazine's award for being one of America's top 200 leaders in the music industry.

Gregg Allman, who remained in California, has been a persona non grata in the Macon area since Herring's conviction, and has only been in town twice since he testified against Herring—both times under "heavy bodyguard," according to former Allman Brother Dicky Betts.

The CHAIRMAN. I had planned to give you the honor of being the last witness so that you could summarize the opposition for us. However, I understand from my staff that you wanted to testify earlier. Otherwise I would have reserved the anchor position for you.

So, if you have finished your conference with Senator Hatch, Mr. Bartell, you may proceed.

STATEMENT OF ROBERT M. BARTELL, EXECUTIVE PROGRAM COORDINATOR, LIBERTY LOBBY

Mr. BARTELL. We appreciate the opportunity to present our views, and like the previous witness, are indeed sorry that we do not have time to go into this more fully.

The CHAIRMAN. Are you pressed for time?

Mr. BARTELL. No; I was given to understand that the committee was pressed for time.

The CHAIRMAN. Well, Senator Hatch is busier than I am this morning, I guess.

Mr. BARTELL. In that case, I am happy to proceed.

We, Senator, did not have the opportunity to poll our 25,000-member board of policy on the specific nomination of Dr. Bourne, but we have polled our membership in the past, and of course, they stand foursquare against the decriminalization of any drug law whatsoever.

We oppose the confirmation of Dr. Bourne for the post of Director of the Office of Drug Abuse. We take this position because we believe unequivocally that confirmation of Dr. Bourne will ultimately result in drastic abuses of and changes in our national drug and drug enforcement policies, with serious and widespread implications, not only domestically but internationally.

The policies which Dr. Bourne has so frequently and publicly espoused and which have been subsequently supported in statements by President Carter are well known to this committee.

Of course, among other things, he is an outspoken advocate of decriminalization of marihuana, and his support for the restudying of our laws governing cocaine possession has been only slightly less vocal.

For example, in testimony before the House Select Committee on Narcotics Abuse and Control, Dr. Bourne recently testified that the administration favors removal of Federal criminal penalities for possession for personal use of small amounts of marihuana, and he made this statement at almost the same time that Dr. Robert Dupont, Director of the National Institute on Drug Abuse, was quoted in the Washington Star as saying that there are currently about 3 million daily users of marihuana, and that his agency considers the substance to constitute at the very least, a health problem.

There are, of course, many studies that view the detrimental effects of marihuana in much stronger terms.

Now, with regard to cocaine, Dr. Bourne has also displayed a level of tolerance which we find to be totally unacceptable.

For example, the Washington Star attributed the following statement to him in February of this year.

> There has been too much emphasis on the dangers associated with cocaine use. There is a presumption that because the legal sanctions against cocaine use were heavy, the drug was comparably dangerous. I think that is a misperception that we have allowed to continue.

Dr. Bourne has also told the House Select Committee on Narcotics Abuse and Control that his office is carefully reexamining our position on the cocaine issue.

While time does not permit us to examine in depth the medical histories of either cocaine or marihuana, we do find Dr. Bourne's position on these substances bizarre from a medical standpoint. We find it particularly incomprehensible when juxtaposed with his views on barbiturates, which his office, of course, is currently considering banning for use by all nonhospitalized persons.

More specifically, barbiturates like cocaine are classified as a schedule II narcotic, with a high abuse potential, although barbiturates are legally available as a prescription drug and for certain conditions such as epilepsy, they are the only effective form of treatment.

In addition, newspaper reports indicate that there are approximately 11 million prescriptions written annually for barbiturates which, at the same time, were responsible for a comparatively few 2,400 deaths in a single year.

The victims, moreover, included persons deliberately bent upon committing suicide and children who accidentally got a hold of the drugs.

Dr. Bourne, however, has indicated that he finds the widespread use of barbiturates unacceptable, while simultaneouly supporting a relaxation of laws governing cocaine, which poses even greater danger for abuse, suicide and accidental ingestion by children.

It should also be noted that cocaine, unlike barbiturates, has virtually no medical use today. Indeed, this substance, which was considered to be the great medical find of the late 19th century, was recognized in the early 20th century as having dangerous and often fatal effects, even when administered under the supervision of a physician.

Its addictive qualities were also recognized not only by scientists but by the public, and the legal restrictions placed upon cocaine resulted in no public outcry, such as followed the prohibition placed upon alcohol.

Indeed, to our knowledge, there is today no great or overriding public sentiment for the relaxation of current restrictions on cocaine.

There is, however, another and equally grave aspect of Dr. Bourne's policies which we would like to bring to the committee's attention, and this has to do with the effects that any relaxation of our current drug policies might have in the international arena.

The recent decision by Congress to repeal the Byrd amendment which had for several years exempted us from the U.N. boycott on Rhodesian chrome, was motived at least in part by a desire to restore the United States to its position as a law-abiding member of the international community, or so its sponsors maintained.

In signing the bill authorizing our immediate participation in this boycott, President Carter stated in part the United States has:

> * * * demonstrated vividly that we are concerned about our own abandonment of the unanimous decision by the United Nations. This puts us on the side of what is right and proper.

Unfortunately, the President, by asking the Senate to approve the nomination of Dr. Bourne and by endorsing the policies of Dr. Bourne, is asking us to fly in the face of another U.N. policy to which this Nation has already sworn allegiance.

For more than six decades, the United States has been a leader in the international war on drug abuse. Since at least 1914, our Government has been a major force in and architect of the international agreements governing the use of opium derivatives and cocaine, and our efforts appear to have culminated in 1961, when, along with a number of other nations, we signed the U.N. single convention treaty on narcotic drugs. This treaty, which remains in full force and effect, and which to our knowledge constitutes the last international word on the subject, provides among other things that such substances as the opium poppy, the coca bush—from which cocaine is derived—and the cannabis or marihuana plant be cultivated, manufactured, sold, imported, exported and so forth, only for medical or scientific purposes.

The United Nations, moreover, has strongly urged the ultimate destruction of the coca fields in the nations of Bolivia and Peru, the two remaining large-scale growers of coca leaves, who were also signatories to the U.N. treaty.

Indeed, the same treaty required the destruction of most coca bushes within 25 years, or by 1986. And the United Nations has continued to advocate this position during the past 16 years.

Thus, the Senate, in considering its approval of this nominee, should be aware that in short, his positions on both marihuana and cocaine, which have the support of the President, will, if implemented, contain the seeds of international consequences.

They will indeed lead to an abrogation of a U.N. agreement, and the consequences could be far more widespread than those perceived as stemming from our earlier policies with regard to Rhodesian chrome.

The reasons presented to the Senate and to the public for this drastic policy shift have, moreover, been grounded in what we feel are the flimsiest of reasoning.

The administration is not nominating an advocate of relaxation of the laws governing cocaine and marihuana because of any new evidence that either of these substances are not at all dangerous or are less dangerous than previously thought.

As Dr. Bourne himself must surely be aware, as recently as 1972, a $2 million malpractice award was given to a patient who, under medical supervision, received an excessive dose of cocaine in the course of surgery and who subsequently suffered irreversible brain damage.

Given this background, the question must remain as to why the President and his nominee have chosen to embark on a course of action which would unquestionably lead to serious problems of drug abuse at home and which would draw the Congress and the Nation into serious violations of a longstanding international agreement.

Liberty Lobby believes that the explanation for this action lies in the examination of two seemingly diverse sources of support of President Carter's Presidential campaign: the rock subculture and the Coca-Cola Co.

As you gentlemen are well aware, the payment of one's political debts is, for better or for worse, a deeply ingrained American tradition. Unlike past Chief Executives, however, President Carter, as he never tires of reminding us, does not owe his office to the State and local political power structure or even, in his view, to such massive political forces as organized labor.

The President's actions with regard to the dams and waterways was, for example, a reflection of his belief that he owes little to our traditional political structure. The reactions of organized labor, which naively thought it might have a solid lock on the President, have been amply and angrily enunciated by George Meany.

But Mr. Carter is recognizing certain selected political debts. In the first place, the close ties of the President and of Dr. Bourne to the drug-oriented rock subculture have been amply documented, not only by our own publication, "The Spotlight," but by other news outlets, such as the New Times magazine.

In fact, the role of such music entrepreneurs as Capricorn Records' Phil Walden, who raised via benefit concerts approximately $2 million for the President's campaign, at a time when it was most desperately needed, was considered one of the more interesting sidelights of the campaign, and of course, the phenomenon pointed to an unclosed loophole in the campaign spending laws.

It is a well-know fact that one of the groups which will benefit mostly from Dr. Bourne's ill-conceived policies will be the same rock culture for which the illicit drug, cocaine, is a mainstay, and marihuana an everyday fact of life.

Ample documentation for this can easily be found in examining the well-publicized difficulties that befell Capricorn's top artist, Greg Allman, who is a close friend of the President and who incidentally was invited to dine privately at the Carter White House even before similar invitations were extended to Members of Congress.

In early 1976, at the same time that Walden, Allman, and so forth were raising funds for the President, these same parties were immersed in a massive Federal cocaine probe, which resulted in 40 indictments and the sentencing of Allman's road manager, Scooter Herring, to 75 years in prison.

This sentence was levied after Allman himself testified that he was addicted to cocaine and that the procuring of this drug was one of Herring's major responsibilities.

Thus, in asking you to acquiesce in the naming of Dr. Bourne as White House drug czar, the President is in effect asking you to give at the very least, lip service to the activities and the mores of a subculture that is closely followed and imitated by massive numbers of teenagers and preteens.

He is, of course, also requesting you to endorse a policy that we believe would be highly unpopular among the vast majority of voters and which, given the potential for increased teenage drug use, could result in a political backlash against every member of this body.

While this, however, constitutes a relatively obvious aspect of today's drug scene, there is a second and even more serious aspect of the scenario which the White House has asked you to participate in, and one which bears directly on the President's longstanding links to the Atlanta-based Coca-Cola Co.

By way of introduction to this little-known connection, the following points should be made: (1) according to data supplied to us by officials of the U.S. Customs Service and of the Drug Enforcement Administration, the United States, in violation of the previously mentioned U.N. treaty, currently permits the annual duty-free im-

portation of more than 1 million pounds of the cocaine-bearing coca leaf; (2) the sole legal importer of these coca leaves is the Maywood, N.J. division of the Stepan Chemical Co., which uses these coca leaves in the manufacture of the syrup base for Coca-Cola; (3) the process carried out by Stepan apparently results in the decocainizing of the coca leaves, and according to DEA, in 1975, there were approximately 1,984 pounds of pure cocaine legally produced by this company. DEA also advises, however, that in the years 1975 and 1976, there was a combined total of only 1,972 pounds of this cocaine legally exported. We have no information as to what became of the substantial balance.

Fourth, the Coca-Cola Co.'s need for the coca leaves, which they have confirmed to us, constitutes a key ingredient in their base, raises serious questions concerning Dr. Bourne's alleged efforts to attack the drug problem by destroying the sources of the drug.

If, as the U.N. treaty demands, the coca fields of Bolivia and Peru were destroyed, we can only assume that the fortunes of the Coca-Cola Co. would also be destroyed with it.

That the legal importation of controlled substances such as cocaine must of necessity represent a serious problem in the area of drug enforcement was exemplified just recently by a situation that occurred at the S. & B. Penick Co. in Newark, which is licensed to import opium.

According to a report in the April 21 edition of the New York Times, five employees of this firm were among those indicted and convicted of taking this opium, coverting it to heroin and selling it on the streets of New York and New Jersey.

The article stated that the grand jury, which deliberated 6 months before returning the indictments, considered their findings to constitute just the tip of the iceberg, and according to the Times report, serious questions were raised in court as to the ability of either the company or the Government to maintain adequate controls on illegal substances which are legally imported.

In fact, it was the conclusion of several persons involved in the probe that these legally imported drugs constitute a major source and perhaps, the only source, of drugs leaking out into our streets and communities.

Given the facts set forth here, Liberty Lobby asks that this committee reject the nomination of Dr. Peter Bourne as Director of the Office of Drug Abuse Policy, on the grounds that the policies for relaxation of penalties on marihuana and cocaine use are ill conceived and represent a definite hazard to every American.

We also ask his rejection on the grounds that the demonstrated vested interest in the Coca-Cola Co. and the production and importation of the cocaine-bearing coca leaves would seriously hamper any efforts that Dr. Bourne might make to cut off the source of the drug.

At this time, Liberty Lobby would also respectfully like to make two additional requests of this committee. We would like to urge that an investigation be undertaken by the Senate of the safeguards surrounding the legal importation of drugs such as opium and the cocaine-bearing coca leaf, as well as the advisability and legality of the United States exporting such substances as pure, uncut cocaine.

In addition, we request that the longstanding violation of an important U.N. treaty of which we were a signatory be referred to the appropriate committee and that hearings be held regarding how this violation, which works to the benefit of the Coca-Cola Co. and other concerns, might quickly and feasibly be corrected.

That completes my testimony, Senator. I would be happy to answer questions.

The CHAIRMAN. Thank you very much, Mr. Bartell. I believe those two suggestions are worthy suggestions. I do not know whether they really address themselves to our committee responsibility or jurisdiction. The last, you recognize, is a foreign relations aspect of the treaty. Well, we will consider it, yes, but I am not sure that that is our jurisdiction. We are concerned with domestic issues and, of course, we are here talking about two men nominated to head programs dealing with a domestic situation. It is related, of course.

Mr. BARTELL. Absolutely.

The CHAIRMAN. I appreciate that.

You speak with great force, with great eloquence, and obvious conviction, and it was an impressive statement.

Mr. BARTELL. Thank you.

The CHAIRMAN. I am just reviewing some questions I had prepared in advance, to see whether they have not been covered in answers supplied in your direct. [Perusing document.] They are adequately answered.

Thank you very much.

Mr. BARTELL. Thank you.

[The prepared statement of Mr. Bartell follows:]

Statement of: Robert M. Bartell, Executive Program Coordinator, Liberty Lobby, 300 Independence Ave., S.E., Washington, D.C. 20003. 202-546-5611.

Before the: Senate Human Resources Committee

Hearings on: Nomination of Dr. Peter Bourne as director of drug abuse policy.

May 13, 1977

Mr. Chairman and Members of the Committee:

I am Robert M. Bartell, Executive Program Coordinator of Liberty Lobby. I appreciate this opportunity to appear today and present the views of Liberty Lobby's 25,000-member Board of Policy, as well as the quarter of a million readers of our weekly newspaper, The SPOTLIGHT.

Liberty Lobby opposes the confirmation of Dr. Peter Bourne for the post of director of the Office of Drug Abuse Policy.

We take this position because we believe unequivocally that confirmation of Dr. Bourne will ultimately result in drastic abuses of and changes in our national drug and drug enforcement policies with serious and widespread implications not only domestically but internationally.

The policies which Dr. Bourne has so frequently and publicly espoused – and which have been subsequently supported in statements by President Carter – should be well known to this Committee. Among other things he is an outspoken advocate of the decriminalization of marijuana and his support for the "restudying" of our laws governing cocaine possession has been only slightly less vocal.

For example in testimony before the House Select Committee on Narcotics Abuse and Control, Dr. Bourne recently testified that the Administration favors removal of federal criminal penalties for possession for personal use of small amounts of marijuana. He made this statement at almost the same time that Dr. Robert Dupont, director of the National Institute on Drug Abuse, was quoted by the Washington Star as saying that there are currently about 3 million daily users of marijuana, and that his agency considers this substance to constitute **at the very least** "a health problem." There are of course many studies that view the detrimental effects of marijuana in much stronger terms.

With regard to cocaine/Dr. Bourne has also displayed a level of tolerance which we find to be totally unacceptable. For example the "Washington Star" attributed the following statement to him in February of this year: "There has been too much emphasis on the dangers associated with cocaine use. There's a presumption that because the legal sanctions against (cocaine) use were heavy the drug was comparably dangerous. I think that's a misperception that we've allowed to continue."

Dr. Bourne has also told the House Select Committee on Narcotics Abuse and Control that his office is "carefully re-examining our position" on the cocaine issue.

While time does not permit us to examine in any depth the medical histories of either cocaine or marijuana, we do find Dr. Bourne's position on these substances bizarre from a medical standpoint. We find it particularly incomprehensible when juxtaposed with his views on barbituates, which his office is currently considering banning for use by all non-hospitalized persons.

More specifically, barbituates – like cocaine – are classified as a Schedule II narcotic with a high abuse potential, although barbituates are legally available as a prescription drug and for certain conditions, such as epilespsy, they are the only effective form of treatment. In addition newspaper reports indicate that there are approximately 11 million prescriptions written annually for barbituates, which at the same time were responsible for a comparatively few 2,400 deaths in a single year. The victims moreover included persons deliberately bent upon commiting suicide and children who accidentally got hold of the drugs. Dr. Bourne however has indicated that he finds the widespread use of barbituates unacceptable, while simultaneously supporting a relaxation of laws governing cocaine which poses even greater danger for abuse, suicide and accidental ingestion by children.

It should also be noted that cocaine, unlike barbituates, has virtually no medical use today. Indeed this substance, which was considered to be the great medical find of the late 19th century, was recognized in the early twentieth century as having dangerous and often fatal effects even when administered under the supervision of a physician. Its addictive qualities were also recognized not only by scientists but by the public, and the legal restrictions placed upon cocaine resulted in no public outcry such as followed the prohibition placed on alcohol. Indeed to our knowledge there is today no great or overriding public sentiment for the relaxation of current restrictions on cocaine.

There is, however another and equally grave aspect of Dr. Bourne's policies which we would like to bring to your attention, and this has to do with the effects that any relaxation of our current drug policies might have in the international arena. The recent decision by the Congress to repeal the Byrd Amendment, which had for several years exempted us from the United Nations boycott on Rhodesian chrome, was motivated at least in part by a desire "to restore the United States to its position as a law-abiding member of the international community," or so its sponsors maintained. In signing the bill and in authorizing our immediate participation in this boycott, President Carter stated in part: The United States has "demonstrated vividly that we are concerned about our own abandonment of the unanimous decision by the United Nations . . . This puts us on the side of what's right and proper." Unfortunately the President by asking the Senate to approve the nomination of Dr. Bourne and by endorsing the policies of Dr. Bourne is asking us to fly in the face of another United Nations policy to which this nation has already sworn allegiance.

For more than six decades the U.S. has been a leader in the international war on drug abuse. Since at least 1914 our government has been a major force in and architect of the international agreements governing the use of opium-derivates and cocaine, and our efforts appear to have culiminated in 1961 when, along with a number of other nations, we signed the UN Single Convention Treaty on Narcotic Drugs. This treaty, which remains in full force and effect and which to our knowledge constitutes the last international word on the subject, provides among other things that such substances as the opium poppy, the coca bush – from which cocaine is derived – and the cannabis or marijuana plant be cultivated, manufactured, sold, imported, exported, etc. only for medical or scientific purposes.

The UN moreover has also strongly urged the ultimate destruction of the coca fields in the nations of Bolivia and Peru – the two remaining large-scale growers of coca leaves – who were also signatories to the UN treaty. Indeed this same Treaty required the destruction of most coca bushes within 25 years – or by 1986 – and the United Nations has continued to advocate this position during the past 16 years.

Thus the Senate, in considering its approval of this nominee, should be aware that, in short, his positions on both marijuana and cocaine – which have the support of the President – will if implemented contain the seeds of grave international consequences. They will indeed lead to an abrogation of a United Nations agreement, and the consequences could be far more widespread than those perceived as stemming from our earlier policies with regard to Rhodesian chrome.

The reasons presented to the Senate and to the public for this drastic policy shift have moreover been grounded in the flimsiest of reasoning. The Administration is not nominating an advocate of relaxation of the laws governing cocaine and marijuana because of any new evidence that either of these substances are not at all dangerous or are less dangerous than previously thought. As Dr. Bourne himself must surely be aware as recently as 1972 a $2 million malpractice award was given to a patient who – under medical supervision – received an excessive dose of cocaine in the course of surgery and who subsequently suffered irreversible brain damage.

Given this background, the question must remain as to why the President and his nominee have chosen to embark on a course of action which would unquestionably lead to serious problems of drug abuse at home and which would draw the Congress – and the nation – into serious violations of a longstanding international agreement. Liberty Lobby believes that the explanation for this action lies in an examination of two seemingly diverse sources of support for President Carter's presidential campaign: the rock sub-culture and the Coca-Cola Company.

As you gentlemen are well aware the payment of one's political debts is – for better or for worse – a deeply ingrained American tradition. Unlike past chief executives however, President Carter, as he never tires of reminding us, does not owe his office to the state and local political power structure or even in his view to such massive political forces as organized labor. The President's actions with regard to the dams and waterways was for example a reflection of his belief that he owed little to our traditional political structure. The reactions of organized labor, which naively thought it might have a solid lock on the President, have been amply and angrily enunciated by George Meany. But Mr. Carter is recognizing certain, selected political debts.

In the first place the close ties of the President and of Dr. Bourne to the drug-oriented rock subculture have been amply documented not only by our own publication The SPOTLIGHT, but by other news outlets such as "New Times Magazine." In fact the role of such music entrepreneurs as Capricorn Records' Phil Walden, who raised via benefit approximately $2 million for the President's campaign at a time when it was most desperately needed, was considered one of the more interesting sidelights of the campaign, and the phenomenon pointed to an unclosed loophole in the campaign spending laws.

It is of course a well-known fact that one of the groups which will most benefit from Dr. Bourne's ill-conceived policies will be this same rock sub-

culture for which the illicit drug cocaine is a mainstay and marijuana an everyday fact of life. Ample documentation for this fact can be easily found in examining the well-publicized difficulties that befell Capricorn's top artist Greg Allman, who is a close friend of the President and who was invited to dine privately at the Carter White House even before similar invitations were extended to members of the Congress and of the Supreme Court.

In early 1976, at the same time that Walden, Allman, et. al., were raising funds for the President, these same parties were immersed in a massive federal cocaine probe which resulted in 40 indictments and the sentencing of Allman's road manager "Scooter" Herring to 75 years in prison. This sentence was levied after Allman himself testified that he was **addicted** to cocaine and that the procuring of this drug was one of Herring's major responsibilities. Thus in asking you to acquiesce to the naming of Dr. Bourne as White House drug czar, the President is in effect asking you to give at the very least lip service to the activities and mores of a sub-culture that is closely followed and imitated by massive numbers of teenagers and pre-teens. He is of course also requesting you to endorse a policy that we believe would be highly unpopular among the vast majority of voters and which—given the potential for increased teenage drug use—could result in a political backlash against every member of this body.

While this however, constitutes a relatively obvious aspect of today's drug scene, there is a second and even more serious aspect to this scenario which the White House has asked you to participate in, and one which bears directly on the President's long-standing links to the Atlanta-based Coca-Cola Company. By way of introduction to this little-known connection the following points should be made:

1. According to data supplied to us by officials at the U.S. Customs Service and at the Drug Enforcement Administration, the United States, in violation of the previously mentioned UN Treaty, currently permits the annual **duty-free** importation of more than 1 million pounds of the cocaine-bearing coca leaf.

2. The sole legal importer of these coca leaves is the Maywood, New Jersey, division of the Stepan Chemical Company, which uses these coca leaves in the manufacture of the syrup base for Coca-Cola.

3. The process carried out by Stepan apparently results in the decocainizing of the coca leaves and, according to DEA in 1975 there were approximately 1,984 pounds of pure cocaine legally produced by this Company. DEA also advised us however that in the years 1975 and 1976 there was a combined total of only 1,972 pounds of this cocaine legally exported. We have no information as to what became of the substantial balance.

4. The Coca-Cola Company's need for the coca leaves—which they have confirmed to us constitute a key ingredient in their base—raises serious questions concerning Dr. Bourne's alleged efforts to attack the drug problem by destroying the sources of drugs. If—as the UN Treaty demands—the coca fields of Bolivia and Peru were destroyed, we can only assume that the fortunes of Coca-Cola Company would be destroyed with them.

That the legal importation of controlled substances such as cocaine must of necessity represent a serious problem in the area of drug enforcement was exemplified just recently by a situation that occurred at the S. & B. Penick Company in Newark, which is licensed to import opium.

According to a report in the April 21 edition of The New York "Times," five employees of this firm were among those indicted and convicted of taking this opium, converting it to heroin and selling it on the streets of New York and New Jersey. The article stated that the grand jury, which deliberated six months before returning the indictments, considered their findings to constitute "just the tip of the iceberg," and according to the "Times" report serious questions were raised in court as to the ability of either the company or the government to maintain adquate controls on illegal substances which are legally imported. In fact it was the conclusion of several persons involved in this probe that these legally imported drugs constitute a major source—and perhaps the major source—of drugs leaking out into our streets and communities.

Given the facts set forth here, Liberty Lobby asks that this Committee reject the nomination of Dr. Bourne as director of the Office of Drug Abuse Policy on the grounds that the policies for relaxation of penalties on marijuana and cocaine use are ill-conceived and represent a definite hazard to every American. We also ask his rejection on the grounds that the demonstrated vested interest of the Coca-Cola Company in the production and importation of the cocaine-bearing leaves would seriously hamper any efforts that Dr. Bourne might make to cut off the source of this drug.

At this time the Liberty Lobby would also respectfully make two additional requests of this Committee.

First, we urge that an investigation be undertaken by the Senate of the safeguards surrounding the legal importation of drugs such as opium and the cocaine-bearing coca leaf as well as of the advisability and legality of the U.S. exporting such substances as pure, uncut cocaine.

In addition we request that the long-standing violation of an important United Nations Treaty of which we were a signatory be referred to the appropriate committee and that hearings be held regarding how this violation—which works to the benefit of Coca-Cola Company and other concerns—might quickly and feasibly be corrected.

Thank you for the opportunity to present our views.

The CHAIRMAN. Our anchorperson for our hearings is Mr. George C. Richardson, president, National Committee To Declare War on Drugs.

We have saved you for the honored position at the end of the list of witnesses, George, and as a New Jerseyite and a friend, it is very nice to have a friend from home here, concluding our hearings on these nominations. Good to see you. We appreciate your coming to us from New Jersey.

STATEMENT OF GEORGE C. RICHARDSON, PRESIDENT, NATIONAL COMMITTEE TO DECLARE WAR ON DRUGS

Mr. RICHARDSON. Thank you, Senator, and thank you for giving me the opportunity to present the position of the National Committee To Declare War on Drugs. I would like to keep it brief and very much to the point.

For more than 25 years, I have had a personal and deep interest in the problem of drug addiction in this country. During these years, I have had the unique opportunity to observe and to examine the effects of drug addiction on the individual, as well as its effects on our society.

Twenty-five years ago, drugs almost took my life. I was discharged from the U.S. service as a heroin addict, but by the grace of God, I was given a second chance. I went on to become a State legislator in New Jersey, where I served for 8 years on many committees dealing with the drug problem. I was also the founder and cofounder of several major organizations in New Jersey, dealing with antipoverty programs, job training programs, and many urban-related problems.

Today's hearings, we believe, mark the beginning of what will become a major national debate about how our Nation will deal with its growing drug crisis.

The directions which come out of this debate will determine, in my estimation, if our cities can be revitalized, and even if our society can survive.

It is vitally important, therefore, that decisions be based on facts, proven by experience, and not on emotions and hysteria.

For the past 30 years, the theory that strong law enforcement could deter and control drug abuse has stood as the cornerstone of our national drug strategy. Based on the premise of supply reduction and demand reduction, it was believed, and still believed by many, that strong enforcement of laws against illegal drugs could stop these drugs from coming into the country, deter people from buying them, and punish those who sold or used them.

It has simply not worked. The drug policies on which we have relied for so long have not only failed to contain the drug problem, but have contributed to its increase and to its staggering socioeconomic impacts on all levels of American society. Despite tougher and tougher drug laws, such as those adopted in New York State, drug addiction has now reached the highest level in our Nation's history, and is still rising.

In irrefutable evidence of the failure of our past drug strategy, I submit the following facts. The Nation's heroin addict population has

reached record levels, with over 800,000 addicts and between 3 and 4 million more occasional heroin users.

Incidentally, Senator, these statistics came from the February interim report of the House Select Committee on Narcotics Abuse and Control.

Once, mainly an urban and poor problem, addiction has now radiated out of the cities and is rising fastest among white, suburban and small city youngsters. In some major cities, 25 percent, 1 out of 4, of all the young men between the ages of 15 and 35 are already heroin addicts.

These addicts cost their cities more each year than their annual municipal budgets, in drug-related crime and connected costs.

The overload of drug cases is choking our already faltering criminal justice system. The vast majority of street crimes are drug related. Over 50 percent of all felony arrests across the country are drug related. More than 80 percent of the inmates in some jails were imprisoned directly or indirectly because of drugs. Marihuana arrests alone have clogged court calendars with more than 1½ million court cases during the past 10 years.

A strong law enforcement strategy has failed to stop illegal drugs from crossing our borders. All law enforcement agencies combined are able to confiscate less than 10 percent of the illegal drugs which come into the country.

And California's attorney general recently warned that authorities in California seized less than 2 percent of all the heroin coming into the State of California.

Incidentally, I think one of the previous speakers from the Chiefs of Police indicated that they confiscated 20,000 to 70,000 pounds a year. I think we all obviously know that there are hundreds of tons of marihuana coming into the country every year.

The CHAIRMAN. One ounce makes 100 cigarettes?

Mr. RICHARDSON. More likely 40 to 50, if you roll them kind of small.

The CHAIRMAN. What is it, anyway? When you make a cigarette out of marihuana, is it all marihuana in the cigarette, within the papers?

Mr. RICHARDSON. Generally, some people cut it and mix it with other kinds of tobacco; people mix it with other things, to dilute it. But a good marihuana cigarette, that is rolled out of an ounce, you might get 40 or 50 cigarettes out of it.

The CHAIRMAN. Would they use a machine for that, or do you put it in the paper and then put it across, the way we used to as kids, when we had to roll our own——

Mr. RICHARDSON. Well, I guess that is the normal way, but some people use the hand machines for rolling, but they are a little thick; that is a little much.

But the point I am making, Senator, is that by forcing addicts into the criminal subculture, we have caused the failure of our treatment programs. All of the Nation's treatment efforts reach less than 15 percent of all the known addicts in the country and cure a very small percentage of those they reach.

To sum up, our current strategy's reliance on strong enforcement of drug laws has failed. It has not stopped illegal drugs from coming into the country. It has not deterred the rise and spread of addiction. And it has failed to help those who are already addicted.

Instead, its staggering socioeconomic consequences are destroying our cities and the very institutions responsible for maintaining our society.

We must find more effective ways to control the social cost of addiction, or it can destroy our society, as it has already begun to destroy our cities.

It is time to change. There are still some who cry for stronger anti-drug laws and stricter law enforcement, but they are the voices of the past. They advocate a strategy that has been proven false by 30 years of experience, and they must not be allowed to deter the Nation from progress.

We of the National Committee To Declare War on Drugs have devoted the past 5 years to examining and exposing the devastating scope of the Nation's addiction crisis.

Dr. Bourne's nomination to head the Office of Drug Abuse Policy has given us real hope that the country will finally face up and learn to deal with its drug problem.

We have studied Dr. Bourne's position, both on the record and at a conference on "Drugs and the Law" at the New York Law School recently, and we agree with him that past drug policies must be re-examined and restructured. We find him eminently qualified by way of experience and dedication to guide this restructuring.

Dr. Bourne understands that the bottom line of the current drug crisis boils down to "change or perish." We urge you, Senator Williams, and your committee not only to confirm Dr. Bourne as Director of the Office of Drug Abuse Policy as quickly as possible, but also, to give him your unanimous mandate for change. Let us get on with the job.

I again thank you for the opportunity of presenting the committee's position.

The CHAIRMAN. Well, I am particularly pleased that we did end up on this strong, positive note of support for Dr. Bourne, and from a person we respect. You certainly have great knowledge and background and have made personal effort in making the scene better, in terms of dealing with a problem that is of grave, grave consequence to this country.

And frankly, with all of the money that we in the Congress have authorized and appropriated, somehow we have not been able to see any significant change.

Mr. RICHARDSON. And I think it is a complicated, philosophical portion that we are dealing with. I think it is significant to hear that today, you find people opposing Dr. Bourne from the extreme left and the extreme right, alined with the Chiefs of Police, all opposed to the philosophical direction that Dr. Bourne and the Carter administration want to go in.

I think people are sick and tired of the crimes that drug addiction is causing and the social implications of it, and I think we have to begin to examine it from the point of view of its effect on the entire society.

Senator WILLIAMS. Well, I agree with you, that the nomination of Dr. Bourne is most encouraging, and we feel that he will direct this whole effort with a new vitality, and let us stay with him.

Mr. RICHARDSON. And let us pray and give him our support.

The CHAIRMAN. Thank you very much, Mr. Richardson.

That concludes our hearing on these nominations of the Director and Deputy Director, and the record will be open for questions until Monday night.

At this point I order printed all statements of those who could not attend and other pertinent material submitted for the record.

[The prepared statement of Mr. Richardson and other material referred to follows:]

National Committee To Declare War On Drugs

23 FULTON STREET, NEWARK, N.J. 07102 • (201) 759-4368

Statement by: Former N.J. Assemblyman George C. Richardson
President, National Committee To Declare War On Drugs
To: Senate Human Resources Committee
May 13, 1977

Mr. Chairman and distinguished members of this Committee: Thank you for giving me this opportunity to present the position of the National Committee To Declare War On Drugs. I shall keep it brief. And very much to the point.

Today's hearings mark the official beginning of what will become a major national debate about how our nation will deal with its growing drug crisis. The directions which come out of this debate will determine if our cities can be revitalized and even if our society can survive. It is vitally important, therefore, that decisions be based on facts proven by experience. Not on emotions or hysteria.

For the past thirty years, the theory that strong law enforcement could deter and control drug abuse has stood as the cornerstone of our national drug strategy. Based on the premise of supply-reduction/demand-reduction, it was believed that strong enforcement of laws against illegal drugs could stop these drugs from coming into the country, deter people from buying them and punish those who sold or used them. It has not worked.

The drug policies on which we have relied so long have not only failed to contain the drug problem, but have contributed to its increase and to its staggering socio-economic impact on all levels of American society. Despite tougher and tougher drug laws, such as those adopted in New York State, drug addiction has now reached the highest level in our nation's history, and is still rising.

In irrefutable evidence of the failure of our past drug strategy, I submit the following facts:

1: The nation's heroin addict population has reached record levels, with over 800,000 addicts, and between 3 and 4 million more 'users'.

2: Once, mainly an urban and poor problem, addiction has now radiated out of the cities and is rising fastest among white, suburban and small-city youngsters.

3: In some major cities, 25% of all the young men between the ages of 15 and 34 are already heroin addicts.

4: These addicts cost their cities more each year than their entire annual municipal budgets, in drug-related crime and connected costs.

MORE

5: The overload of drug cases is choking our already faltering criminal justice system:

a: The vast majority of street crime is drug related.
b: Over 50% of all felony arrests, across the country,are drug related.
c: More than 80% of the inmates in some jails were imprisoned directly or indirectly because of drugs.
d: Marijuana arrests alone have clogged court calendars with more than a million and a half cases during the past ten years.

6: A strong law enforcement strategy has failed to stop illegal drugs from crossing our borders. Law enforcement agencies combined, are able to confiscate less than 10% of the illegal drugs which come into the country. And California's Attorney General recently warned that authorities can seize less than 2% of the heroin coming into that state.

7: By forcing addicts into the criminal subculture we have caused the failure of our treatment programs. All the nation's treatment efforts reach less than 15% of its addicts, and cure only a very small percentage of those they reach.

To sum up: Our current strategy's reliance on strong enforcement of drug laws has failed. It has not stopped illegal drugs from coming into the country; it has not deterred the rise and spread of addiction; and it has failed to help those who are already addicted. Instead, its staggering socio-economic consequences are destroying our cities and the very institutions responsible for maintaining our society.

We must find more effective ways to control the social costs of addiction or it can destroy our society as it has already begun to destroy our cities. It is time for change. There are still those who cry for stronger anti-drug laws and stricter law enforcement, but they are the voices of the past. They advocate a strategy that has been proven false by thirty years of experience. They must not be allowed to deter the nation from progress.

We, of the National Committee To Declare War On Drugs, have devoted the past five years to examining and exposing the devastating scope of the nation's addiction crisis. Dr. Bourne's nomination to head the Office of Drug Abuse Policy has given us real hope that the country will finally face and learn to deal with its drug problem. We have studied Dr. Bourne's positions, both on the record, and at a conference on Drugs and The Law in which we both participated recently, at the New York Law School. We agree with him that past drug policies must be re-examined and restructured, and find him eminently qualified by way of experience and dedication, to guide this restructuring. Dr. Bourne understands that the bottom line of the current drug crisis boils down to: change or perish.

We urge you, gentlemen, not only to confirm Dr. Peter Bourne as Director of the Office of Drug Abuse Policy as quickly as possible, but also to give him your unanimous mandate for change. Let us get on with the job.

Thank you very much.

College of Physicians & Surgeons of Columbia University | *New York, N.Y. 10032*

DEPARTMENT OF ANESTHESIOLOGY 630 West 168th Street

May 17, 1977

The Honorable Orrin G. Hatch
United States Senate
Washington, D.C.

Dear Senator Hatch:

At the confirmation hearings held by your committee, Dr. Peter Bourne reiterated his belief that "marihuana is no more dangerous to health than tobacco."

I find Dr. Bourne's statement most surprising because it ignores some of the reports of recent studies performed under the aegis of the National Institute on Drug Abuse. These studies were summarized in March during hearings held by the U.S. House of Representatives Select Committee on Narcotic Abuse under the chairmanship of Congressman Lester Wolff, and they have been corroborated by others performed abroad. The results of these studies indicate that marihuana, in doses that are currently used in this country, impairs the formation of germ cells (sperm) in young people. In view of this fact, the possibility of genetic damage to future generations must be considered.

Studies showing that marihuana disrupts and may permanently impair the normal activity of the limbic area of the brain which controls emotional behavior were also reported at the Wolff Hearings, at which Dr. Bourne also testified. This effect is so well known, that the use of marihuana is contraindicated among people prone to mental illness, although such patients are allowed to smoke tobacco cigarettes. Since Dr. Bourne is a psychiatrist, he should be aware of this fundamental difference between tobacco and marihuana.

Dr. Bourne, by this statement, has disqualified himself from occupying a most sensitive position that requires a scientifically trained physician capable of evaluating the ongoing research dealing with the long term health risks of the use of marihuana and other psychotropic drugs. Furthermore, Dr. Bourne's other public remarks indicate that he has prematurely taken sides in the controversy over the health risks of marihuana. His attitude and opinions faithfully reflect those of the National Organization for the Reform of Marihuana Laws.

Sincerely yours,

Gabriel G. Nahas

Gabriel G. Nahas, M.D., Ph.D.
Research Professor of Anesthesiology
President,
International Medical Council on Drug Use, Inc.

GGN/co
Encl.

Summary of Testimony before the U.S. House
of Representatives Select Committee on
Narcotics Abuse

March 16, 1977
by Gabriel G. Nahas, M.D., Ph.D.

1. A scientific estimation of patterns of use of marihuana indicates that prevalence of use in a given population is obligatorily associated with a high incidence of use in a fraction of this population. The more widespread the usage, the greater the fraction of heavy users. Marihuana use has followed such a pattern in the U.S.: 8% of the 1976 high school graduating class are daily marihuana smokers, while 53% of the same population used the drug during the same year.

2. Marihuana products (cannabinoids) like "THC" are fat soluble substances which remain in the body for at least 8 days after a single administration. Anyone who uses marihuana more than once a week can not be drug free.

3. In minute amounts, cannabinoids disrupt cellular metabolism, and prevent the formation of DNA, RNA and proteins, chemicals essential for proper cell division and growth.

4. Cannabinoids, whether psychoactive or not, decrease the rate of cell division when added in minute amounts to tissue culture of normal or abnormal (cancerous) cell lines. This decrease in cell division is associated with an increase in the number of abnormal cells which do not contain their proper amount of DNA, the chemical which carries the genetic code. Abnormal white blood cells and sperm cells have been sampled from chronic hashish users.

5. In a controlled study, 16 young men (in good mental and physical health) smoked 5 to 15 marihuana cigarettes daily for one month. After this time, they presented a decrease in sperm count, a decrease in motility of sperm, and a marked increase in abnormal forms of sperm cells. The possibility of a genetically transmitted abnormality as a result of daily marihuana usage is raised as a result of these observations.

6. The possibility of genetic damage is illustrated by a study on rhesus monkeys fed THC over a period of 3 years. Failure to conceive or resorptions were associated with THC treatment of the female parents; abortions, stillbirths and neonatal deaths were associated with THC treatment of male parents

(raising the possibility of a drug effect transmitted via the sperm). Six male surving offspring had abnormal locomotor activity and increased behavioral response to stimuli.

These results indicate that women of child bearing age should not smoke marihuana.

7. THC might be useful in the treatment of asthma, glaucoma. Another cannabinoid, cannabidiol might be useful in the treatment of epilepsy.

8. THC acts on the septal area of the limbic system of the brain ("old brain") where structures controlling emotional behavior are located.

9. Monkeys who had deep electrodes implanted in the "limbic area" of their brains were studied for 6 months while they were exposed daily to marihuana smoke. Abnormal brain wave patterns persisted 3 months after smoking was stopped. Microscopic studies of the brains of these monkeys showed lesions of the nerve cells in this septal limbic area which controls emotional behavior.

10. Many psychiatrists believe that marihuana should not be used by any person prone to mental illness or who has been treated for such an illness which this drug might trigger or worsen.

11. THC interacts with many other psychoactive drugs either by increasing their depressive properties or by decreasing their stimulant ones.

12. Daily users of marihuana develop a tolerance to the physiological and psychological effects of this drug.

13. Marihuana users, when they stop using the drug, do not present withdrawal symptoms similar to those occurring with opiates. However, with abstinence, changes in behavior and mood have been reported. Daily use of marihuana is associated with behavioral dependence and drug-seeking behavior.

14. Before taking the irreversible step of decriminalization of marihuana, let us be quite sure that we have a better way of discouraging its use.

REFERENCES

PHARMACOLOGY OF MARIHUANA vol. 1 & 2, p. 1-838
(no of authors: 250), Braude, M. and S. Szara, Raven Press, New York, 1976.

MARIHUANA: CHEMISTRY, BIOCHEMISTRY, CELLULAR EFFECTS, p. 1.-552
(no of authors: 126), Nahas, G., and W.D.M. Paton, Springer-Verlag, New York, 1976.

MARIJUANA, EFFECTS ON HUMAN BEHAVIOR, p. 1-397
(no of authors: 18), Miller, L., Academic Press, 1973.

CHRONIC CANNABIS USE (ANNALS OF N.Y. ACAD. OF SCI.), p. 1-430
(no of authors: 75), Vol. 282, 1976

CANNABIS AND HEALTH, p. 1-447
(no of authors: 12), J.D.P. Graham, Academic Press, New York, 1976.

MARIHUANA: CHEMISTRY, PHARMACOLOGY, METABOLISM, CLINICAL EFFECTS, p. 1-409
(no of authors: 7), R. Mechoulam, Academic Press, 1973.

FOR THE LAY PUBLIC:

KEEP OFF THE GRASS. p. 1-205
Nahas, G., Reader's Digest Press, 1976.

Letters

About the Damage Marijuana Can Do

To the Editor:

Now that New York State is going to ease the marijuana laws, it is time to tell the public about the drug's harmful medical effects, since many are under the false impression that marijuana is no more harmful than tobacco or alcohol.

Tobacco has no hallucinogenic effect, whereas marijuana does. Marijuana is far more irritating to the respiratory tract than tobacco. It takes 20 years of heavy tobacco smoking to produce the same type of severe sinusitis, pharyngitis, bronchitis and emphysema that one year of daily marijuana smoking produces. Tar from marijuana, painted on the backs of animals has caused cancer.

As for alcohol: One can have one or two drinks a day for 20 or 30 years and never suffer ill effects. Alcohol is water soluble. One ounce is completely metabolized down to water and carbon dioxide in 12 hours. Marijuana is not water soluble. It is fat soluble, and the active psychotropic ingredient (delta-9-THC) accumulates in the tissues of the body that are fat-laden, including the brain and sex organs, in the same manner as DDT. In animal experiments with radioactively tagged delta-9-THC, the THC was still detected in the brain, liver, lungs and reproductive organs two weeks after a single injection. THC accumulates in the system in the same way that DDT has been found to accumulate.

One does not hallucinate from one or two drinks. Hallucinations from alcohol usually occur only with far advanced disease, whereas marijuana's effect on the brain causes the hallucinogenic effects of distorted time and space and sound in some cases every time the drug is used even in small doses.

Scientific studies worldwide have shown that chronic marijuana use causes inhibition of cellular growth, reduction in sperm production, development of abnormal sperm cells, interference of the synthesis of important genetic material in the cell, interference with the immune system, destruction of chromosomes, abnormal embryonic developments and birth defects in experimental animals and, above all, brain damage.

The medical literature is also replete with scores of psychiatric studies which illustrate that the chronic use of marijuana can cause impaired judgment, diminished attention and concentration span, slowing of time sense, loss of motivation, loss of thought continuity, loss of learning ability and in numerous instances psychosis.

Although alcoholism is presently our most serious drug problem, marijuana has the potential of becoming an even greater problem, since it is being used by an uninformed public. One has to recognize that, for many, decriminalization is tantamount to legalization.

No one wants to throw young people into jail, but there are effective alternatives to decriminalization. In the Sacramento Citation-Diversion Program, for example, youths arrested for possession are referred to a drug information study course; upon its completion, their arrest records are wiped clean. Perhaps it is time for the media to interview reputable scientists, physicians and patients in drug rehabilitation centers concerning the harmful effects of marijuana before a whole generation of our youth is severely damaged because of ignorance.

NICHOLAS A. PACE, M.D.

New York, May 6, 1977

The writer is president, New York City Affiliate, National Council on Alcoholism.

adpa
ALCOHOL AND DRUG PROBLEMS ASSOCIATION OF NORTH AMERICA

FORMERLY NORTH AMERICAN ASSOCIATION OF ALCOHOLISM PROGRAMS (NAAAP)

May 10, 1977

The Honorable Harrison Williams
Chairman, Committee on Human Resources
United States Senate
Washington, D. C.

Dear Mr. Chairman:

Re: Confirmation Hearing on
Dr. Peter G. Bourne
May 13, 1977

This letter is to support the nomination of Dr. Peter G. Bourne, Special Assistant to the President for Health Issues, to serve as Director of the Office of Drug Abuse Policy.

Dr. Bourne is eminently qualified to fill this position. For more than ten years he has gained stature and the respect of his professional colleagues for his keen insight into the full range of problems and concerns regarding substance abuse. During this period he has served in positions of high responsibility at the State and Federal levels of government. He has proven administrative skills.

Last summer during the legislative hearings on the establishment of the Office of Drug Abuse Policy (ODAP), I was pleased to offer testimony in support of this action and, further, recommended that alcohol problems be specifically included in the title and responsibilities of ODAP. With Dr. Bourne as its director, I am even more enthusiastic about broadening ODAP's responsibilities to include alcohol abuse and alcoholism, with a second Deputy Director for Alcohol Problems. This is, in my opinion, the best if not only way to insure the necessary high degree of coordination of all federal agencies having responsibility for alcohol programs.

Membership of Alcohol and Drug Problems Association of North America (ADPA) includes professional and lay individuals, state alcohol and/or drug abuse authorities, private profit and non-profit and public agencies at federal, state and local levels of government.

Whereas I should have liked to present these sentiments in person during your May 13 hearings, I am aware of the time limitations and have, therefore, written this for the record. We appreciate this opportunity to support the nomination of Dr. Bourne.

Respectfully,

H. Leonard Boche

H. Leonard Boche
President

COUNCIL OF STATE & TERRITORIAL ALCOHOLISM AUTHORITIES
INCORPORATED

THOMAS E. PRICE, Ph.D.
EXECUTIVE DIRECTOR
GARY F. JENSEN, M.S.
DEPUTY DIRECTOR

1101 15TH STREET, N.W.
SUITE 206
WASHINGTON, D.C. 20005
(202) 452-9500

May 11, 1977

The Honorable Harrison Williams
Chairman
Committee on Human Resources
United States Senate
Washington, D.C.

Dear Mr. Chairman:

SUBJECT: Confirmation Hearing on Dr. Peter G. Bourne
May 13, 1977

On behalf of the State Alcoholism Authorities, 28 of whom are combined drug and alcohol authorities, I would like to express full support of the nomination of Dr. Peter G. Bourne, Special Assistant to the President for Health Issues, to serve as Director of the Office of Drug Abuse Policy.

We have been extremely encouraged by the President's appointment of Dr. Bourne as Special Assistant for Health Issues and have urged that his responsibilities be broadened to include alcohol issues officially with adequate professional staff support. We have since been assured that his official designation will clearly include alcohol and he is already responding to many requests from the alcoholism constituency with sensitivity and understanding.

A number of state authorities have fully supported the establishment of the ODAP and would like to see alcohol specifically included in its title and responsibilities. With Dr. Bourne as its Director, the broadening of ODAP's responsibilities to include alcohol abuse and alcoholism would further serve to achieve the interdepartmental coordination so urgently needed in the field and facilitate a truly cooperative effort among the three interrelated fields.

Dr. Bourne is eminently qualified for this position and in the more than ten years in the field he has gained stature and the respect of his colleagues and has a keen insight in the area of substance abuse. Again we are pleased to fully support his nomination and sincerely appreciate your consideration.

Sincerely yours,

Jess Wilson

Jess Wilson
President

National Association of State Drug Abuse Program Coordinators

Suite 900 · 1612 K Street, N.W. · Washington, D. C. 20006 · (202) 659-7632

February 18, 1977

Honorable Harrison A. Williams
United States Senator
The Russell Senate Office Building
Room 352
Washington, D. C. 20510

Dear Senator Williams:

I understand that Doctor Peter Bourne is being considered for the Director of the Office of Drug Abuse Policy. I strongly support his nomination to this position. Doctor Bourne is well versed about the needs of States regarding substance abuse and he has demonstrated the knowledge, energy and compassion to more than adequately fulfill this task.

Your support for his nomination is sincerely appreciated.

Kind personal regards.

Sincerely,

Richard J. Russo

Richard J. Russo, M.S.P.H.
Chairman

RJR:ak

National Association of State Drug Abuse Program Coordinators

Suite 900 · 1612 K Street, N.W. · Washington, D. C. 20006 · (202) 659-7632

February 18, 1977

Hon. Harrison Williams, Jr.
United States Senate
Washington, D.C.

Dear Senator Williams:

On February 12, President Carter announced that the Administration would create the Congressionally-sanctioned Office for Drug Abuse Policy, and nominated Dr. Peter G. Bourne to be its Director.

We are most pleased that this much needed Office will finally be established, as desired for nearly two years by most of Congress and by our member States.

And, we are especially pleased that President Carter has selected Dr. Bourne to be the Director.

We wish, by this communication, to second and endorse most heartily and enthusiastically this nomination.

Dr. Bourne has been a leading clinician, researcher and innovator in the fields of drug abuse and alcoholism for more than a decade. As the first director of the Georgia State drug abuse program, under then-Governor Carter, Dr. Bourne was personally instrumental in not only establishing a multi-phasic drug abuse program that responded quite directly to the needs of that State, but also in forging the critical links with mental health and other components of the health services delivery system.

In that State capacity, Dr. Bourne was also an original member of our National Association, a ranking professional whose advice and consultation were eagerly sought by the other member States. His guidance was crucial in the development of both our National Association as well as the Federal-State system that today is the foundation of the national drug abuse effort.

His credentials as a policymaker are quite impressive. Dr. Bourne served both as associate director for policy development and deputy director of the former Special Action Office for Drug Abuse Prevention. We are quite familiar not only with his

contributions to policy and program development domestically, eg, the rapid expansion of treatment programs, the development of Single State Agency planning and program management processes, the improvement of methadone maintenance treatment regimens, the pioneering development of responses to the emerging problem of polydrug abuse, and the coordination of technical assistance programs, but also his much applauded service as an international representative of the U.S. Government.

For most of Dr. Bourne's years in SAODAP, I was the chairman of an international committee on social policy in drug abuse, and can advise you from personal knowledge that Dr. Bourne is held in the very highest esteem by drug abuse professionals, including foreign government officials, throughout the world. Indeed, I have had occasion to journey to foreign conferences with Dr. Bourne and have witnessed repeated displays of professional and official regard in those years and afterward that virtually assure his world-wide acceptance as the chief policymaker of our government.

In more recent years, Dr. Bourne has been associated with the internationally-recognized Drug Abuse Council, which is famed in the U.S. for its policy analysis. Dr. Bourne has demonstrated in this affiliation a thorough command and knowledge of all disciplines in drug abuse prevention and control, ranging from international narcotics agreements, new developments in pharmacology, new techniques in treatment, law enforcement efforts and policy direction.

Finally, since his initial designation as a Special Assistant to President Carter, Dr. Bourne has discussed with us and other groups the broad outlines of policy being considered by the Administration. Obviously, he is intent on maintaining the integrity of individual departmental operations, yet, insuring that there is cohesion to the national effort through the development of comprehensive national policies, supported by a cooperative, facilitative but firm coordinating effort through ODAP, which will opt for policy guidance instead of White House dictate, as we experienced in the past.

We therefore are most pleased to endorse this nomination and to urge your speedy approval of Dr. Bourne. Should the Committee desire more detailed testimony during confirmation hearings, Chairman Russo and I will be available to you at your convenience.

Sincerely,

Raeburn F. Hesse

Raeburn F. Hesse
Executive Director

National Association of State Drug Abuse Program Coordinators

Suite 900 · 1612 K Street, N.W. · Washington, D. C. 20006 · (202) 659-7632

April 27, 1977

Senator Harrison Williams
Chairman
Committee on Human Resources
Room 4230
Dirksen Senate Office Building
Washington, D.C. 20510

Dear Senator Williams:

For the purposes of the Committee's hearings of May 13 on the nominations of Dr. Peter G. Bourne and Lee I. Dogoloff to be Director and Deputy Director, respectively, of the Office for Drug Abuse Policy, we would like to submit an addendum to the testimony we sent you previously.

The addendum is as follows:

"The National Association has worked closely with Lee Dogoloff for several years, first as a special representative in the Special Action Office for Drug Abuse Prevention, then as Director of the Division of Community Assistance at the National Institute on Drug Abuse, and more recently as the deputy director of the Office of Federal Drug Management in OMB.

"Mr. Dogoloff possesses a unique knowledge not only of the workings of the Federal government -- indeed, he is one of the few Federal officials with direct knowledge of the operations of all of the more than one dozen agencies having drug abuse responsibilities -- but, thanks to his NIDA service, is particularly knowledgeable about the Federal-State-local government relationship and the functions and services performed by drug abuse units at these levels of government.

"Our relationships with him have been on a broad front of issues, as diverse as formula grant development and funding; grant and contract funding; development of the Statewide services contracts; Federal minimum wage regulations affecting therapeutic community centers; State and sub-State planning; program standards; licensing; interface with the criminal justice system; management information systems; Federal policy issues such as system stability, programs policy, and funding policy; rural issues; Federal planning, etc.

"On all of these endeavors, Mr. Dogoloff has proven to be an informed, flexible and cooperative representative of the Federal government who is simultaneously sensitive and responsive to the needs of State and local governments and the demands of the system.

"In our opinion, Mr. Dogoloff will perform quite effectively as Deputy Director and we are pleased to second his nomination."

Thank you, Senator, for permitting us an opportunity to express our opinions.

For the Chairman,

Rayburn F. Hesse

Rayburn F. Hesse
Executive Director

RFH:dgt

N.T. SCHRAMM
1300 MARKET ST
SAN DIEGO CA 92120

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SENATOR HARRISON WILLIAMS
SENATE COMMITTEE ON HUMAN RESOURCES RM 4230
WASHINGTON DC 20510

DEAR SENATOR WILLIAMS,

ON BEHALF OF THE CALIFORNIA CONFERENCE OF METHADONE PROGRAMS, I WOULD LIKE TO CONVEY OUR VERY STRONG SUPPORT FOR THE APPOINTMENT OF DOCTOR PETER BOURNE AND MR LEE I. DOGOLOFF AS DIRECTOR AND DEPUTY DIRECTOR RESPECTIVELY OF THE OFFICE OF DRUG ABUSE POLICY.

WE HAVE LONG BEEN ON RECORD IN SUPPORT OF SUCH A HIGH LEVEL PLANNING AND COORDINATING OFFICE. BOTH MEN WILL INHANCE THE POTENTIAL OF THAT OFFICE. DOCTOR BOURNE AND MR DOBOLOFF HAVE ESTABLISHED OUTSTANDING REPUTATIONS AS EFFECTIVE POLICY MAKERS AND PLANNERS WITH VISION. BOTH HAVE THE ADMINISTRATIVE SKILLS, INITIATIVE, COMPETENCE, AND CREATIVITY TO BRING ORDER AND DIRECTION TO THE NATIONAL OFFICE OF DRUG ABUSE POLICY.

I WILL BE WILLING TO PROVIDE PERSONAL STRONG SUPPORTIVE TESTIMONY FOR BOTH MEN IF YOU DESIRE. PLEASE HAVE YOUR STAFF NOTIFY ME IF I CAN PROVIDE ANY FURTHER INFORMATION OR ASSISTANCE IN THIS MATTER WHICH IS OF UTMOST IMPORTANCE TO THE NATION'S SERIOUS DRUG ABUSE DILEMMA.

RESPECTFULLY,

N. T. SCHRAMM, PRESIDENT
CALIFORNIA CONFERENCE OF METHADONE PROGRAMS
1300 MARKET STREET
SAN DIEGO CALIFORNIA 92120
(714) 582 6477

18:17 EST

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HONORABLE HARRISON WILLIAMS
CHAIRMAN
COMMITTEE ON HUMAN RESOURCES
UNITED STATES SENATE
WASHINGTON DC 20510

IT PLEASES ME TO SUPPORT THE NOMINATION OF DR PETER BOURNE AS DIRECTOR OF THE OFFICE OF DRUG ABUSE POLICY DR BOURNE ENJOYS AN EXCELLENT REPUTATION INTERNATIONALLY FOR HIS KEEN INSIGHT, KNOWLEDGE AND EQUITABLE RECOMMENDATIONS CONCERNING THE DRUG PROBLEM FIELD WE ARE INDEED PLEASED THAT SUCH A MAN IS BEING CONSIDERED FOR THIS MOST IMPORTANT POSITION

ARCHER TONGUE
DIRECTOR
INTERNATIONAL COUNCIL ON ALCOHOL AND ADDICTIONS
LAUSANNE SWITZERLAND

14:33 EST

MGMCOMP MGM

National Council on Alcoholism inc.
733 THIRD AVENUE, NEW YORK, N.Y. 10017 • (212) 986-4433

February 28, 1977

Honorable Harrison Williams
Chairman
Senate Committee on Human Resources
U. S. Senate
Washington, D. C. 20510

Dear Mr. Chairman:

I am writing to express the concern of the National Council on Alcoholism relative to the potentially fragmented development of the Administration's alcoholism policy. It appears that there are, at present, at least four possible sources for such policy: the Special Assistant to the President for Drug Abuse and Mental Health, the President's Commission on Mental Health, the White House Office of Drug Abuse Prevention Policy (ODAPP), and HEW Secretary Joseph Califano. We understand that your Committee will shortly begin confirmation hearings on the President's nominee to the ODAPP directorship. We believe such hearings are an ideal forum through which the Administration might clarify its alcoholism policy and make known its alcoholism policy makers.

On the specific issue of the purview of ODAPP, it seems to us that the language of PL 94-237, the Drug Abuse Amendments of 1976 which set up this office, does not extend ODAPP's statutory authority to development and implementation of alcoholism policy. Furhter, NCA and the majority of the alcoholism constituency support the wisdom of maintaining a clearly and separately defined alcoholism policy, as currently and continuously developed by the Department of Health, Education and Welfare and it's National Institute on Alcohol Abuse and Alcoholism. We perceive a multitute of problems being created instead of being solved were drug abuse and alcoholism efforts combined. Combination of policies at the White House level could be a precursor to combination at all levels.

The primary problem is one of focus. To combine policies on drug abuse and alcoholism, which presently enjoy a de facto separation, would constitute a diffusion of responsibilities resulting in a very generalized approach yielding few, if any, breakthroughs in specific problem areas. In view of the limited resources available to a relatively infant Federal alcoholism movement, such diffusion could considerably hinder measurable progress toward the eradication of alcoholism.

The National Council on Alcoholism has struggled for more than 30 years for a separate identity and visibility for alcoholism. Were alcoholism submerged under a general approach to "drug abuse," irreparable damage could be done to our past and future efforts. Likewise, were Federal alcoholism policy subsumed under the purview of a White House office on drug abuse policy, it is obvious to us that alcoholism would, thus, be relegated to a lower priority. The result might be dissipation of an organized, active and informed alcoholism constituency which, to date, has played a major role in making adequate services available to alcoholic persons and their families.

Of further concern to NCA is the fact that the basic natures of Federal drug abuse policy and alcoholism policy are presently quite different. Drug abuse policy is closely related to a concept of controlling both supply and demand with a heavy emphasis on law enforcement; the Federal response to alcoholism emphasizes community-based education, prevention and treatment. Systematic research data does not currently exist which defines the basic differences and similarities between alcoholism and drug abuse in the areas of administration and treatment, let alone policy development. Decision-making affecting this issue is presently a product of opinions, philosophies, perceptions and political considerations. We believe policy concerns of this magnitude warrant a more scientific base from which to draw conclusions.

Perhaps the most pursuasive argument specifically against policy combination in a White House office is the apparently firm commitment of HEW Secretary Joseph Califano to a clear delineation of alcoholism policy from within the Department of Health, Education and Welfare. No HEW Secretary in recent memory has initiated his stewardship with such strong and profound statements on alcoholism, evincing a personal and professional obligation to develop a sound National alcoholism policy.

In closing, we believe that the inadequacy of preparation for and study on all aspects of the combination of drug abuse and alcoholism efforts, and the prematurity of such an endeavor at the policy-making level, far outweigh the perceived benefits. Specifically, a White House Office on Drug Abuse Prevention Policy, legislatively exclusive of alcoholism concerns, cannot be permitted expansion, as a harbinger of future combination of efforts, would be counter-productive, divisive in the field and not in concert with the realities of the distinct socio-legal perceptions of alcoholism and drug abuse. We hope the issues raised in this letter can be addressed during your Committee's confirmation hearings on ODAPP's director and that you can lend emphasis to the need for a coherent Federal alcoholism policy.

I want to take this opportunity to express the sincere thanks of the National Council on Alcoholism for your countless efforts on behalf of our Nation's 10 million alcoholics and their families. I look forward to working with you personally in the year ahead and I hope that you and your staff will not hesitate to contact me when you feel such contact would be helpful or appropriate.

Sincerely yours,

Thomas J. Swafford
President

NCAAP

NATIONAL COALITION FOR
ADEQUATE ALCOHOLISM PROGRAMS
RIVERVIEW BUILDING • 1925 N. LYNN STREET, ARLINGTON, VIRGINIA 22209
(703) 527-5083

February 28, 1977

Honorable Harrison A. Williams, Jr.
Chairman
Committee on Labor and Public Welfare
United States Senate
Washington, D. C. 20510

Dear Mr. Chairman:

At its January 28, 1977 meeting, the National Coalition for Adequate Alcoholism Programs reaffirmed its position that at the present time, the needs of people suffering from alcoholism and those working in the alcoholism field can best be met through the maintenance of a separate Federal focus and a separate agency with specialized alcoholism leadership, program identity and funding. Implicit in the nature of a separate alcoholism focus is a clear delineation of responsibility for the development of Federal alcoholism policy. However, at the present time, there appears to be a potential fragmentation of responsibility within the Executive Branch. In recent weeks, the position of Special Assistant to the President for Mental Health and Drug Abuse has been created, the President's Commission on Mental Health has been established, confirmation hearings for the director of the Office of Drug Abuse Prevention Policy have been scheduled and the Secretary of Health, Education and Welfare has made very strong public statements committing his Department to renewed efforts to combat alcoholism. While all these events are welcomed, there has been no clear enunciation of what role, if any, each office or agency will play regarding alcoholism policy.

The Coalition, representing the private and voluntary interests in the alcoholism field, has a vital interest in ensuring that Federal alcoholism policy is carefully developed and is consistent with the needs of alcoholic people and their families. To this end, it is important that the Coalition membership be given clear direction as to where accountability for Federal alcoholism policy will rest within the Executive Branch. We feel the upcoming confirmation hearings on the ODAPP directorship would be an ideal forum for the articulation of the Amdinistration's position. We hope you will take the opportunity which the confirmation hearings will provide to discuss with the President's nominee his perceptions of the Administration's plans for development and implementation of Federal alcoholism policy.

Honorable Harrison A. Williams Jr.

February 28, 1977

As always, the Coalition appreciates the good work you and your Committee have done towards combatting the disease of alcoholism. We are grateful for your support and look forward to working with you and your staff.

Sincerely,

Leo Perlis
Chairman

Enclosure: NCAAP Membership List

National Committee To Declare War On Drugs

23 FULTON STREET, NEWARK, N.J. 07102 • (201) 759-4368

May 6, 1977

Senator Harrison A. Williams
Chairman
Human Resources Committee
Senate Office Building
Washington, D.C. 20510

Dear Pete:

We were dismayed to learn, recently, that confirmation hearings on President Carter's choice for Director of the White House Office On Drug Abuse Policy have already been postponed twice, amid mounting opposition, spearheaded by Edward M. Davis of the International Association of Chiefs of Police, and several ultra-right and ultra-left wing organizations.

The Carter administration, and the nation, must get on with the job of re-evaluating old drug policies and formulating new ones on the basis of their effect on the entire drug problem. However, by projecting the divisive marijuana issue as the fulcrum of Dr. Peter Bourne's confirmation hearings, these fringe groups are attempting to force the administration to abandon its campaign commitments to new directions in the nations war on drugs, and lock it into their own restricted view of stringent law enforcement as the only solution.

These confirmation hearings will define the issues, and mark the beginning, of a national dialogue on future drug policies and priorities. It is therefore vital that they reflect the FULL scope of the growing addiction crisis, and not permit the decriminalization of marijuana to emerge as the single most important issue. On behalf of the National Committee To Declare War On Drugs, I therefore respectfully request to testify for Dr. Bourne's confirmation, to the following facts:

Chief Davis' view that "drug abuse will best be controlled in this nation...by a stringent enforcement policy" has already been proven wrong. Law enforcement has been the cornerstone of the nation's more than 30-year old policy of Supply-reduction/Demand-reduction. It has not only failed to control addiction but has contributed to its increase. Recent reports by the House Select Committee On Narcotics, the U.S. League of Municipalities and various other groups show that; Heroin addiction has reached the highest level in our nation's history (800,000 addicts and 3-4 million heroin users) and is now rising fastest among middle-class suburban and small-city youngsters.

In some cities one-fourth of the young men between 15-35 are already heroin addicts whose drug related crimes and other related factors cost their cities more than one and one-half times as much as their entire annual municipal budgets. Treatment and rehabilitation programs reach less than 15% of all the nation's addicts, and all law enforcement efforts, on which we have relied so strongly, are able to confiscate less than 10% of all the illegal drugs smuggled into this country each year. These facts delineate a national strategy failure with staggering socio-economic implications. Unless we find ways to bring the addiction crisis under control, it can destroy our entire society as it has already begun to destroy our cities.

We recently participated in a two-day Drugs and the Law Conference with Dr. Bourne at the NY Law School and are convinced that he is eminently qualified to chart the new directions and philosophical approaches which can bring the addiction crisis under control. The outcome of the national debate over how to deal with the drug problem has grave implications for the future of our society, therefore it is vital that it be launched with the focus on facts and not hysteria. For this reason, I hope very much that you will permit me to testify on Dr. Bourne's behalf, that you and the other members of the Committee will speak out forthrightly in support of the Carter administration's search for a new, sane drug policy, and that you will demonstrate this support by confirming Dr. Bourne as Director of the White House Office On Drug Abuse Policy immediately after the Friday, May 13th hearing.

With best regards.

Sincerely yours,

George C. Richardson
President

Enc.

cc: Members of Committee

national committee to declare war on drugs

Drug fighters seek to enlist aid of Carter

JUNKIE
THE DEADLIEST COVER-UP!

By CHARLES Q. FINLEY

The Newark-based National Committee to Declare War on Drugs, headed by former Assemblyman George Richardson, will present to the Carter Administration a comprehensive plan to combat the nation's growing drug addiction crisis.

The drug problem is worse in the United States today than when the committee was formed in 1972, with 720,000 known addicts as compared to 630,000 when I founded the organization," Richardson said. "I predict there will be a million addicts by 1980 unless public apathy can be dispelled and an adequate, meaningful program started."

Later this month, a paperback version of "Get Up, You're Not Dead," a book written by Richardson and Ingrid Frank about the former assemblyman's addiction to heroin in his youth and his bitter battle to break the habit, will be published.

George Richardson
'Public apathy'

The paperback — "Junkie, The Deadliest Coverup'" — has an additional section charging former President Nixon with a coverup of a massive drug abuse problem.

The book also charts a step-by-step program for fighting the problem and winning the war on drugs.

* * *

"We will call for a federal Public Service Corporation to solve the drug problem, taking the fight out of politics," Richardson said. "It will take all aspects into consideration, including cutting of drug sources and treatment.

"There are many of the same people heading government drug addiction projects today who deceived the people before about the extent of the menace. Without question, the situation is worse now."

Richardson has been touring the country, seeking ideas and broad-based support for the war on drugs. He was accorded support by 113 black publishers, many of them in the South, during his recent trip.

"I had found much apathy in the East, possibly because in cities like New York, where the crisis is so acute, other programs have failed," Richardson said. "But people in the South were active and concerned about what to them is a more recent problem. I think the South, particularly the blacks, will play a critical role in influencing the Carter Administration to face up to its responsibilities in this vital area."

* * *

Rt. Rev. Paul Moore Jr., Episcopal bishop of New York, joined Richardson and Dr. Calvin Rolark, co-chairman of Black Media, the national cooperative of the 114 black newspapers in support of the effort. They have launched the committee's "Key Cities Drug Awareness Program."

The devastating social and economic effects of drug addiction will continue to plague our society long after the economy has recovered," Rev. Moore warned.

He urged widespread church and organizational support "to make our nation face and find solutions in this drug addiction crisis."

Dr. Rolark said the newspaper publishers in his organization will help organize local war on drugs movements and work toward more prominent exposure of the national drug abuse problem in all newspapers.

THE SUNDAY STAR-LEDGER, November 14, 1976

23 fulton street / newark, new jersey 07102 / phone (201) 643-3748 754

(PHILADELPHIA(PA.))
The Evening Bulletin Monday, January 31, 1977

Ex-Addict Urges Tough Drug Laws

Former Assemblyman Richardson Raps Nixon 'Cover-Up'

By CAROL INNERST
Of The Bulletin Staff

A former New Jersey assemblyman who was an ex-junkie sees a nation of a million heroin addicts by 1980 unless a concerned public demands new, comprehensive programs to deal with the addiction crisis.

The legislator, George C. Richardson of Essex County, accuses former President Richard M. Nixon of a cover-up greater than Watergate — the administration claim in 1972 that the nation had turned the corner in conquering the drug epidemic and reduced the number of U.S. addicts to about 250,000.

"There were 600,000 addicts in the country in 1960," he said, "and the latest statistics from the federal Drug Enforcement Administration list 720,000 heroin addicts. Most of the major cities feel this figure is low."

Richardson has declared war on drugs, and he wants the rest of the country to join him.

His own poignant story of how he shook the monkey off his back is told in a paperback book entitled "Junkie — The Deadliest Cover-Up." Co-author is Ingrid Frank, who has been involved in the human rights movement since she came to this country as a German Jewish refugee.

In addition to co-authoring the book, the pair co-founded the National Committee to Declare War on Drugs in 1972.

The Newark-based Committee never got much off the ground that year because of the impact of the administration's proclaimed "victory" over the problem, said Ms. Frank. But they did continue to exist, and today, more concerned than ever about this worsening problem, Richardson and Ms. Frank have undertaken a drive to draw attention to the drug addiction problem.

For starters, they will sponsor "walks against death" in Detroit and in Philadelphia this spring, Richardson said, during a visit to the Bulletin offices.

He wants to drive home the awful statistics, and what they mean.

The fact is, he says, that heroin use is growing among white, middle class, suburban kids; law enforcement agencies succeed in rounding up only five percent of the stuff that's on the market; in some cases the cost of addiction runs higher than the municipal budget in some cities.

According to Richardson, the full impact of the devastation wrought by drug addiction must be measured in terms of productivity, or the lack of it, and crime.

"Sixty to 80 percent of street crime, police say, is attributed to drug use," he continued. "Our Manpower training programs are doomed to failure because addicts can't succeed."

Ms. Frank observed that "alcoholism kills individuals and families, but heroin kills individuals, families and cities.

"The typical addict has a $40 a day habit," she went on. "Some run higher. But nobody with a job can afford $40 a day, so they have to turn to crime. Since an addict gets only 20 percent of what an item is worth, he must steal $200 worth of goods a day to support his habit.

"Fifty to 60 percent of the court cases are drug-related, and 60 to 80 percent of the street crimes, so there's no question that heroin has a greater effect on society than alcoholism. You can stay drunk on $1 a day."

Their goal now is to stir an apathetic public into an enraged public, tired of muggings and robberies and being afraid to go out at night, and demanding that something be done about it.

"It won't happen, Richardson said, if the same people are left in control of the country's drug programs. What's needed, he says, is an infusion of new people with new ideas on how to prevent, cure and control the drug addiction.

George C. Richardson
. . . "1,000,000 addicts"

National Committee To Declare War On Drugs

23 FULTON STREET, NEWARK, N.J. 07102 • (201) 759-4368

THE NEW YORK TIMES, THURSDAY, APRIL 21, 1977

5 Employees of a Plant in Newark Charged With Large Opium Thefts

By DONALD JANSON
Special to The New York Times

NEWARK, April 20—A six-month investigation by a Federal grand jury has charged that opium stolen by employees from a chemical processing plant here has been reaching the streets of Newark and New York in quantities large enough for conversion to millions of dollars worth of heroin.

Terrence Flynn, Assistant United States attorney in charge of the investigation, said today that five employees of S. B. Penick and Company and two other persons had been indicted so far but that the grand jury "is not satisfied" that this was the extent of the problem.

George C. Richardson, president of a five-year-old, Newark-based organization, the National Committee to Declare War on Drugs, said an investigation by the group showed that 77 pounds of opium confiscated in the seven arrests were "only the tip of the iceberg."

Six of the seven persons indicted in February have pleaded guilty to conspiracy to distribute opium or conspiracy to try to convert it to heroin, Mr. Flynn said.

The most recent guilty plea, before Judge George Barlow in Federal District Court in Trenton, was entered today by Roberto Robinson.

Like two others who pleaded guilty earlier, Mr. Robinson mixed chemicals at the Newark plant of S. B. Penick, one of only three companies in the country licensed by the Federal Drug Enforcement Administration to import opium. Penick uses it to make morphine for pharmaceutical houses.

Mr. Flynn said that a pipefitter at Penick would appear before Judge Barlow to make his plea later this week. The maximum penalty for those indicted is 15 years in prison and a $25,000 fine.

Mr. Richardson of the anti-drug group has written to Attorney General Griffin B. Bell and Representative Lester L. Wolff, Democrat of Great Neck, L.I., and chairman of the House Select Committee on Narcotics Abuse and Control, requesting an investigation of the adequacy of present methods of safeguarding opium stocks.

"The S. B. Penick case raises serious doubts about the ability of these companies to control the dangerous drugs in their possession," he told Attorney General Bell.

"It also raises serious doubts about the Government's ability to provide the necessary safeguards to prevent legally imported dangerous drugs from leaking out and wreaking havoc in our communities."

One of the persons arrested in February who was not a Penick employee was Bess Bembry of Irvington, N. J. She was charged with using her kitchen as a laboratory to convert opihm to heroin. Among items confiscated were laboratory equipment, chemicals, textbooks and a "formula" for the conversion.

John Fallon, regional director of the Drug Enforcement Administration in New York, said the scheme to siphon opium from Penick stocks had been discovered after his regulatory unit audited the Penick inventory and found shortages.

"Buys" of opium by his undercover agents followed in Newark and New York. A total of 77 pounds of opium and 10 pounds of morphine was confiscated. United States Attorney Jonathan L. Goldstein said this was enough to make $8.7 million worth of pure heroin at street prices.

Mr. Fallon said this was the first instance of organized smuggling from legally imported stocks of opium since the Drug Enforcement Administration was created in 1973.

But Mr. Richardson, a former heroin addict and four-term New Jersey Assemblyman, said his committee had evidence of thefts from Penick dating back four years.

He said former Penick employees had told him they had seen open cartons of opium in the plant and chunks "lying around loose." He said painters working there temporarily had put "chunks" in their work gloves and had walked out with it.

Referring to the theft scheme, William F. Lacey, vice president of sales and marketing at Penick, said: "Our security has been subject to considerable tightening since this happened."

For his part, Mr. Richardson said: "Routine audits are not effective enough. If thefts can be stopped only after the stuff gets out on the street."

He said in his letter to Representative Wolff that "it is possible that the sizable largest supply of heroin filtering into the New York metropolitan area comes not from illegal sources but from the nation's largest importer of legal opium."

"Our preliminary investigation into this matter," he wrote, "indicates that the siphoning off of drugs from Penick has been going on for several years and during this time hundreds of pounds of opium have been stolen, converted to heroin and sold on the streets of surrounding communities."

CHARLES B. RANGEL
19TH CONGRESSIONAL DISTRICT
NEW YORK

NEW YORK STATE WHIP

2432 RAYBURN HOUSE OFFICE BUILDING
WASHINGTON, D.C. 20515
TELEPHONE: 202-225-4365

GEORGE A. DALLEY
ADMINISTRATIVE ASSISTANT

PLEASE RESPOND TO
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Congress of the United States
House of Representatives
Washington, D.C. 20515

COMMITTEE:
WAYS AND MEANS

SELECT COMMITTEE ON NARCOTICS
ABUSE AND CONTROL

DISTRICT OFFICES:
55 WEST 125TH STREET
NEW YORK, NEW YORK 10027
TELEPHONE: 212-348-1400

720 COLUMBUS AVENUE
NEW YORK, NEW YORK 10025
TELEPHONE: 212-850-1500

MS. VIVIAN JONES
DISTRICT ADMINISTRATOR

May 5, 1977

The Honorable Harrison J. Williams
Chairman
Senate Committee on Human Resources
Washington, DC 20510

Dear Mr. Chairman:

On May 13, your Committee will be considering the nomination of Dr. Peter Bourne as Director of the Office of Drug Abuse Policy. I respectfully urge you to pass favorably on the recommendation before you.

During my years in Congress, I have been very much concerned about the narcotics problem. My interest in this area is heightened by the fact that Harlem is most adversely affected by the severe drug problem that our nation generally faces.

As a member of the House Select Committee on Narcotics Abuse and Control, I am keenly aware of the need to have such a key appointee in place in order to give our national drug effort much needed direction. The longer we wait the more difficult the problem becomes.

Knowing that you share my concern regarding this issue, I look forward to your Committee taking favorable and timely action.

Best regards.

Sincerely,

Charlie

CHARLES B. RANGEL
Member of Congress

CBR:jkw

1977 MAY 10 PM 3:03
SENATOR
WILLIAMS, N.J.

92-496 O - 77 - 10

MARYLAND DRUG ABUSE RESEARCH AND TREATMENT FOUNDATION, INC.

ALFRED V. MILIMAN, J.D.
DIRECTOR

M-DART

222 E. REDWOOD ST.
BALTIMORE, MD. 21202
TELEPHONE 301-837-4949

May 10, 1977

Chairman
Human Resources Committee
United States Senate
Washington, D.C. 20510

Dear Senator Williams:

It was understandable that I was not permitted to testify during the hearings on Dr. Peter Bourne's confirmation for reasons of time lack. Your Ms. Nancy Olsen kindly suggested that I submit by mail, the content of my testimony.

I charge Dr. Bourne with being a drug abuser and having the Syndrome and condition underlined in red on the attached Enclosure 1. In the alternative, I charge him with disseminating obsolete and harmful theory, as outlined in green Enclosure 1. Finally, I charge him with aiding and abetting an organization of drug abusers - NORML - a group dedicated to the decriminalization and legalization of Marihuana. Dr. Bourne's public and private statements in this connection, which would have been included in oral testimony, are omitted here.

Enclosure 2 is Dr. Hart's excellent report on diagnostic applications.

Enclosure 3 is Dr. Russell's fine book, "Marihuana Today," the best writings on the subject to date.

Proof exists that Cannabis is probably the greatest waster of minds and the greatest public health menace in history. This will be demonstrated at M-DART's Symposium this fall.

It is formally requested that this letter and the three (3) enclosures be placed into evidence as part of the record of your Committee's confirmation hearings re Dr. Peter Bourne.

Very truly yours,

ALFRED V. MILIMAN, J.D.
Director, M-DART

AVM/psg
Enclosures:
Three (3)

COPY

M-DART INTERNATIONAL SYMPOSIUM

SEPTEMBER 10-12, 1977 — BALTIMORE HILTON, DOWNTOWN

"CHEMICAL ABUSE-ACCENT ON MARIJUANA"

INCLOSURE #1 to M-DART ltr. 5/10/77

U.S. SENATE
HUMAN RESOURCES COMMITTEE

THE THOUGHT DISORDER OF THE

CANNABIS SYNDROME

by: Alfred V. Miliman, J.D.; John Wallace, III; M. William Kenney, Jr.;
Jerry Fite, B.S.; Abraham T. Carreno, M.D.; Ruth P. Wilson

This work was not funded but carried on by the principal investigator in the normal course of employment at a private psychiatric hospital, two methadone programs, a community mental health center, a prison, and in his law and counselling practice. All M-DART* staff, associates, and consultants worked on a volunteer basis. We are particularly grateful to the approximately 1400 drug and alcohol dependents and the many hundreds of "straights" from whom most observations, conclusions and theories evolved. Special thanks must go also to the following for their patience, guidance, and wisdom these past eleven years:

I. J. Taylor, M.D.; Vincent Hofstetter, P.A.; S. L. Magness, M.D. (dec.); Lino Lapenna, M.D.; Ralph Oropollo, Ph.D.; A. B. Hooton, M.D.; and Frank J. Ayd, M.D.

Alfred V. Miliman is Director and principal Counselor - Therapist - Researcher of M-DART. John Wallace, III is a recovered addict with extensive treatment experience. M. William Kenney, Jr. is a para-medic, physician's assistant, U.S. Army. Jerry Fite is an educator in Baltimore City. A. T. Carreno is a practicing psychiatrist. Mrs. Ruth P. Wilson is collaborator and editor of this paper.

* Maryland Drug Abuse Research and Treatment Foundation, Inc.
222 E. Redwood Street, Baltimore, Maryland 21202
A private, non-profit, non-fee charging agency.

M-DART concurs with Kolansky and Moore in their finding that a Cannabis Syndrome develops with regular marihuana use:

> "During the past six years we have seen a clinical entity different from the routine syndromes usually seen in adolescents and young adults. Long and careful diagnostic evaluation convinced us that this entity is a toxic reaction in the central nervous system due to regular use of marihuana and hashish.
>
> "Contrary to what is frequently reported, we have found the effect of marihuana to be not merely that of a mild intoxicant which causes a slight exaggeration of usual adolescent behavior, but a specific and separate clinical syndrome unlike any other variation of the abnormal manifestations of adolescence. We feel there should be no confusion, because regardless of the underlying psychological difficulty, mental changes - hallmarked by disturbed awareness of the self, apathy, confusion and poor reality testing - will occur in an individual who smokes marihuana on a regular basis whether he is a normal adolescent, an adolescent in conflict, or a severely neurotic individual."

and, three years later, 1975:

> "We presented our fingings on a 5 year clinical study of 38 patients, ages 13 to 24 showing that marihuana alone caused serious psychological and neurological effects. We told the Commission that marihuana and hashish have a chemical effect that produces a brain syndrome marked by distortion of perceptions and reality.
>
> "This leads to an early impairment of judgment, a diminished attention and concentration span, a slowing of time sense, difficulty with verbalization, and a loss of thought continuity charcterized by a flow of speech punctuated with non sequiturs, which leaves the listeners puzzled. In time, the chronic smoker develops a detached look as decompensation of his ego or character occurs.
>
> "In the last 9 years we have seen hundreds of patients who have suffered psychiatric and neurological symptoms as a result of marihuana use, and have described the findings in almost 60 of these patients, in our publications."

and with L. J. West:

> "The experienced clinician observes in many of these individuals personality changes that seem to grow subtly over long periods of time: diminished drive, lessened ambition, decreased motivation, apathy, shortened attention span, distractibility, poor judgment, impaired communication skills, loss of effectiveness, introversion, magical thinking, derealization and depersonalization, diminished capacity to carry out complex plans and prepare realistically for the future, a peculiar fragmentation in the flow of thought, habit deterioration and progressive loss of insight."

West concludes from this description:

> "There is a clinical impression of organicity in this syndrome which I simply cannot shake off or explain in any other fashion."

Conrad Schwarz might have been describing many of our subjects:

> "The predominant feature of the acute state of intoxication is one of euphoria, which is seldom defined but seems to apply to the general subjective state of the individual, which is described as one of wellbeing, contentment and satisfaction in the absence of external stimuli which would justify this feeling. Some regular users demonstrate a feeling of contentment and acceptance of a general life situation which objectively involves a diminution in real life stimuli and a lower level of functioning than previously. Some regular users remain happy within themselves as their work capacity, ambition, motivation, living situation and personal hygiene decline."

Harvey Powelson gave the writer a fit in 1967 when an adolescent in group therapy displayed his article on marihuana, which he believed to be relatively harmless. I would not have considered him an authority then, but he is now:

> "My stance toward marihuana has shifted to the extent that I now think it is the most dangerous drug we must contend with for the following reasons:
>
> (1) Its early use is beguiling. It gives the illusion of feeling good. The user is not aware of the beginning loss of mental functioning. I have never seen an exception to the observation that marihuana impairs the user's ability to judge the loss of his own mental functioning.
>
> (2) After 1 to 3 years of continuous use the ability to think has become so impaired that pathological forms of thinking begin to take over the entire thought process.
>
> (3) Chronic heavy use leads to paranoid thinking.
>
> (4) Chronic heavy use leads to deterioration in body and mental functioning which is difficult and perhaps impossible to reverse."

Andrew Malcolm has done very thorough and insightful work:

> "Concerning the acute effects of THC intoxication much excellent work has been done in the last few years. Virtually nothing, however, has been done to determine the relationship between marihuana and the vulnerability of the intoxicated person to persuasion. But this drug is an illusionogen. In sufficiently high doses it is capable of producing what has been called the altered state of consciousness. Such a state, when it develops, has a number of characteristics which I have described in some detail in my book "The Pursuit of Intoxication." These include an impairment of the ability to test external reality and a tendency to engage in nonlogical thinking. Marked changes in time sense and of body image occur. Emotional responses are altered and sensory perception is typically distorted. The result of these myriad effects is the creation of a person who is fundamentally changed from what he is like in a state of normal waking consciousness. His critical judgment is impaired and his capacity to effect transactions with reality is markedly reduced. As a result we may say with some certainty that such a person would be poorly defended against the influences flowing toward him from the milieu in which he has consumed the drug.
>
> "This, of course, is an hypothesis based on much clinical observation; but it is one that should not be lightly dismissed without some attempt at scientific validation."

and,

> "Now this clinical picture has been called the amotivational state and I consider it to be of the greatest importance that it be either confirmed or disconfirmed that this condition develops in direct response to the chronic use of marihuana. Most of these patients give me the impression that they have been repeatedly persuaded that the values and behaviors that characterize the inclusive society are entirely lacking in virtue even though they are unable to give an informed argument to support their own rigidly held beliefs. In fact they seem to have been converted, through repeated exposure to the drug and to the milieu in which it is used, to a philosophy of life that has very little survival value in a technologically advanced and liberal democratic society."

finally,

> "It is my opinion that among the many unusual characteristics of marihuana use one of the most important is that its users may be rendered suggestible and that what they consider to be their voluntary espousal of a new system of values may be due, in fact, to influences beyond their conscious control."

Malcolm's observation above involves the area in which M-DART was most interested. The data on the following pages was obtained during the years indicated, first at a private psychiatric hospital, and thereafter at 2 high schools, 2 universities, 2 community colleges, 2 prisons, drug programs, demonstrations, and even at social events or other meetings where valid information could be obtained. Substantial effort was made to validate every attitude and viewpoint. The drug use shown is accurate, for we know of no one who said he smoked that did not, that did not have at least several symtoms of what M-DART came to regard as the Cannabis Syndrome. The person, patient, student or prisoner had no idea of our purposes in exploring these topics, the discussion of which they found most interesting.

The first figure shown is the total number who had the particular belief or condition listed, a firm belief, usually passionate, at the extremes. The second figure is the number of the total who were or who had been regular pot smokers. (About 55% of the white and only 6% of blacks graduated to LSD. Not one acid user was encountered who had not first used marihuana). The information shown was not obtained by questionnaires, but by face to face interview and counselling, with many subjects personally known and followed up for 6, 7, 8 and 9 years.

SUBJECT / VIEWPOINT OR ATTITUDE	TOTAL IN GROUP HAVING VIEWPOINT		TOTAL CANNABIS USERS HAVING VIEWPOINT	
1. THE "SYSTEM"				
The U.S. is a very rotten, very sick society. (1967-1972)	384	of which	380	were pot smokers
. . . . and should be destroyed. (1967-1973)	80	"	79	"
The U.S. is an imperfect society with room for great improvement. (1967-1972)	50+	"	3	"
The U.S. is a good, probably a great society. (1967-1972)	20	"	1	"
2. THE PRESIDENCY				
President Johnson (Nixon) is a war criminal, another Hitler. (1967-1972)	65	"	64	"
President Johnson (Nixon) is doing a good job in foreign affairs including Asia and Viet Nam. (1966-1972)	48	"	3	"
I hope (wish, pray) for the assassination of President Johnson (Nixon). (1968-1972)	21	"	21	"
. . . . and I would kill him myself if it could be done safely. (1968-1972)	10	"	10	"
3. THE WAR				
We are murderers in Viet Nam. (1967-1971)	380	"	379	"
Our presence in Viet Nam is illegal, immoral and unethical. (1967-1972)	128	"	107	"
Our intervention in Viet Nam was necessary and proper. (1967-1971)	45	"	2	"
Viet Nam is a civil war - nothing more. We had no business being there. (1967-1971)	86	"	73	"

SUBJECT — VIEWPOINT OR ATTITUDE	TOTAL IN GROUP HAVING VIEWPOINT		TOTAL CANNABIS USERS HAVING VIEWPOINT	
		of which		were pot smokers
We should have blown North Viet Nam off the map. (1967-1972)	31		2	
Would you grant that the possibility exists that our intervention in Viet Nam may have helped prevent the Third World War? (1968-1973) YES	160	"	24	"
NO	274	"	267	"
THAT'S CRAZY	228	"	227	"
I am a Viet Nam veteran and am most anti-war. (1967-1973)	20	"	20	"
I am a veteran of the Viet Nam war who believes our participation in it was correct and necessary. (1967-1971)	14	"	0	"
I am or was a deserter. (1968-1972)	8	"	8	"
I am a conscientious objector. (1968-1972)	6	"	6	"
I have or will evade the draft. (1967-1972)	14	"	14	"
I don't like the idea of going into the service, but I will if I have to. (1967-1970)	20	"	2	"
I am a draft "counselor" (anti-war). (1967-1971)	7	"	7	"
4. THE MILITARY AND INDUSTRY				
The military-industrial complex in the U.S. is most dangerous to all decent people. (1968-1972)	87	"	86	"
Industry and the military have and will continue to serve the nation well. (1969-1972)	35	"	2	"
I am demonstrating here on campus because military recruiting must be stopped. (6 students, 1 faculty, Johns Hopkins University) (1971)	7	"	7	"

The war was a made-to-order issue for the young during the late 60's. Their natural aversion to war, and the values taught them by parents and the "system" (peace, love, charity, brotherhood, etc.) prior to marihuana use were perfectly suited to their subsequent psychotic behavior. The tendency of one who is regressed (or schizophrenic) to believe ego-protective material is very strange. (I believe Jerry Rubin just admitted that they did conspire for a full year to violently disrupt the 1968 Democratic Convention. He maintained he was right about Viet Nam despite the belief of five U.S. Presidents.)

(Jane Fonda plans to sue for the spying and "harassment" during her fervent anti-war crusade. Interestingly, she might have been executed in most countries for her anti-government pro-enemy activities.)

SUBJECT	VIEWPOINT OR ATTITUDE	TOTAL IN GROUP HAVING VIEWPOINT		TOTAL CANNABIS USERS HAVING VIEWPOINT	
5.	RELIGION AND RELATED				
	The church is phony, materialistic, not meaningful and not for me. (1968-1973)	146	of which	144	were pot smokers
	I am a witch (warlock). (1968-1972)	12	"	12	"
	I worship Satan. (1968-1972)	3	"	3	"
	I belong to Hare Krishna. (1968-1971)	6	"	6	"
	I have a most intense interest and belief in astrology (ages 15 - 23). (1967-1972)	38	"	37	"
	I am truly searching to find more meaning in my life. (1967-1972)	114	"	112	"
	I believe in "heavy" meditation. (1967-1972)	115	"	114	"
	I am a black muslim. (1969-1972)	41	"	38	"
	I am a Jew now turned on by Eastern mysticism. (1969-1973)	4	"	4	"
6.	SCHOOL				
	I have changed my college major from engineering, business or science to the Arts or Humanities, the better to help people. (1967-1972)	45	"	44	"
	I am a high school or college dropout. (1967-1972)	135	"	124	"
	Conventional classroom teaching is lousy, worthless.	60	"	58	"
	Student (1967-1971)	(46)	"	(44)	"
	Ditto, Faculty (1967-1972)	(14)	"	(14)	"
	I am demonstrating actively here at College Park (University of Maryland) because we should not have to take final exams this semester. (1971)	14	"	14	"
7.	THE "REVOLUTIONARY"				
	I am a Maoist. (1967-1972)	30	"	30	"
	I am "SDS" all the way and believe that violence is necessary to serve our great cause. (1967-1971)	37	"	37	"
	I am a black revolutionary who believes in violence in the cause of the people. (1968-1972)	16	"	15	"
	I support Che Guevara. (1968-1970)	22	"	22	"
	I have thrown stones or rocks at pig cops during demonstrations. (1967-1971)	42	"	42	"

SUBJECT	VIEWPOINT OR ATTITUDE	TOTAL IN GROUP HAVING VIEWPOINT		TOTAL CANNABIS USERS HAVING VIEWPOINT	
8.	MINORITY GROUP PHILOSOPHY				
	The oppression of blacks cause their drug abuse. (1967-1971)	64	of which	45	were pot smokers
	I am a black Muslim. (1967-1972)	41	"	38	"
	I major(ed) in Indian Studies at college. (1970-1973)	6	"	6	"
	Whitey is entirely to blame for our troubles. (1967-1972)	66	"	63	"
	I am an ardent Third World advocate. (1968-1971)	38	"	37	"
	More opportunity exists in the U.S.A. for minority groups than in any other country. (1968-1971)	75+	"	6	"
9.	THE FAMILY AND THE HOME				
	I am or was an adolescent runaway. (1966-1970)	74	"	60	"
	My parents are pretty rotten. (1965-1972)	236	"	228	"
	My parents and grandparents did a lousy job with everything important, particularly love, caring and concern. (1965-1972)	114	"	113	"
	I am not a virgin (white, single, age 14 - 18). (1966-1971)	27	"	26	"
	Did pot smoking precede loss of virginity? (1966-1971) YES	24	" NO	3	"
	I have not cut my hair for over a year and do not intend to. (1966-1970)	140	"	139	"
10.	THE JOB (1968-1972)				
	I am or was an "alienated" factory or similar worker whose job is not sufficiently "meaningful".	28	"	27	"
	I have held 4 or more jobs the past 12 months.	18	"	18	"
	I am on a methadone program and have not worked more than one or two days the past 6 months.	58	"	42	"
	I would sabotage a factory assembly line if given the opportunity to strike such a blow for peace and love, and against materialism.	15	"	15	"
	I have worked on the same job steadily for the past 3 years.	60+	"	2	"

SUBJECT	VIEWPOINT OR ATTITUDE	TOTAL IN GROUP HAVING VIEWPOINT		TOTAL CANNABIS USERS HAVING VIEWPOINT	
11.	DRUG PHILOSOPHY				
	If we really have a free society, all drugs should be legal. (1968-1971)	82	of which	81	were pot smokers
	Marihuana should and must be legalized. (1966-1973)	405	"	402	"
	I am a drug "counselor" on a non-methadone drug program who believes pot should be legalized. (1968-1972)	45	"	38	"
	I believe all "natural" drugs should be legalized. (1968-1972)	48	"	47	"
	I believe psychedelic drugs expand the mind and are beneficial to the user. (1966-1972)	261	"	261	"
	Marihuana is quite safe compared to alcohol. (1967-1972)	152	"	147	"
	Marihuana is dangerous, it should not be legalized. (1967-1975)	160+	"	* 25	

* This figure, 25, includes 3 subjects who had acute psychotic reactions from smoking, one who "lost" 3 days (amnesia) - both effects are rare - and 16 addicts (opiate) who realized their earlier changes due to regular pot use.

12.	ECOLOGY, CONSERVATION, HEALTH				
	We must stop the SST program (Super Sonic Transport). (1971-1972)	38	"	38	"
	Pollution one day will kill us all - there's little doubt about that. (1968-1972)	88	"	87	"
	Overpopulation is a serious problem and will hurt us all. I do not believe people should have children now to bring them into this rotten world. (1968-1972)	133	"	126	"
	Abortion should be legal and primarily up to the woman herself. (1969-1975)	604	"	316	"
	Abortion is a sin, a crime, murder. (1975)	38	"	1	"
	Additives to food, or chemicals used in agriculture are very bad. Neither nature nor we need them. (1968-1972)	90	"	86	"
	An organic or macrobiotic diet is essential to good health. (1968-1971)	46	"	40	"
	There is a health crisis in the U.S.A. (1975-1976)	41	"	32	"
	The U.S.A. has the best health service in the world. (1975-1976)	60	"	13	"

Symptoms and patterns began to emerge very early in this study. One striking fact was the absence in the official record (hospital chart, agency file, etc.) of marihuana use. Just the opposite, reference to "no drug abuse" was found for many pot smokers. A form of psychiatric regression involving simplistic, emotional, cause-oriented, ego-protective thinking was prevalent. A sincerity or passion was present not based on fact, reason, logic or objective study, but on an apparent need to externalize problems, with contradictory or conflicting data ignored or blocked out of conscious, intellectual awareness. Introversion, mystical and magical thinking was common. The magical thinking, where the thought connotes the deed or act, where opinion becomes fact, causes a low frustration tolerance, one explodes when confronted, or totally turns off.

Over 98% of the group having the very strong, rabid, fervent anti-war, anti-system, counter-culture attitude* was under 35. But who were some of these people? Adolescents and students abounded, but who else:

Individuals having a very strong, very emotional anti-war, anti-system, counter-culture, pro-marihuana viewpoint (1966-1973):

	Grand Total Interviewed (est.)	*Total with Attitude	Marihuana Users	
Lawyers	70+	8	8	or 100%
Probation Officers	20+	7	7	
Psychologists	20	9	9	
Psychiatrists	18	3	3	
Teachers - College Level	40+	29	29	
Below College	18	18	18	
Press or Media	35	22	22	
Masters Degree or Doctorate In Arts or Humanities	36	29	29	
Organized Anti-War Veterans	20	20	20	
Drug Abuse Counselors	60	32	32	
Social Workers	14	6	6	
Sociologists	6	4	4	or 100%
All Other (Ages 16 - 38 Included)	1000+	364	361	

The effects of this thought disorder on the Media, the great American Free Press, has been devastating in our opinion. Advocacy journalism, suppressed, slanted and distorted news to reflect the journalist's or editor's bias, has been the norm since 1966. The result has been catastrophic to the U.S. It was fascinating to see totalitarian party line drivel in publications such as "Look", "Life", Newsweek, The New York Times, Washington Post and The Baltimore Sun. A letter sent to Time magazine complaining of this sick, negative treatment of the "news" brought the response that Time could not support government policy because it would then be viewed merely as a propaganda arm of the Federal government. Is it any wonder we are losing the ideologic war when our one voice in the world is so busy attacking us, or our allies?

The following is listed primarily to illustrate the general widespread failure to get accurate drug histories. All 181 were psychiatric inpatients, ages 13 to 21 inclusive, 1965 - 1970.

SYMPTOM	MARIHUANA USE		"STRAIGHT"
Depression, with overt suicide attempt, real or acting out	23		6
Paranoid Symptoms	81		23
Flat Affect	72		22
Speech Blockage	66		17
Thought-mood Dissociation	54		19
Runaway	49		13
Unsocialized Aggression	44		14
Withdrawal	26		11
Hyperkinetic	20		9
Totals in Group	135	+	46
(All patients had 2 or more symptoms)		181	

(1) 112 of 181 were diagnosed as adolescent adjustment reactions.

(2) In 88 of the 135 charts, there was either no reference nor significance attached to the marihuana or any other drug use. (Opiate addicts were specifically excluded from the 181 total.)

(3) In 7 of the charts there was specific mention of "no drug abuse" when Cannabis Syndrome symptomatology was strikingly evident to the author.

So . . . . what is the Cannabis Syndrome? Does this happen when you get "high"? No. Getting "stoned" hasn't changed for several thousand years. The eater (now smoker) of the drug experiences pleasure, increased excitement combined with a heightening of all senses, a distortion-usually a magnification-of the dimensions of space and time, and a keener sense of hearing combined with a greater susceptibility to increase in pre-existing feelings. Pleasure, which follows the initial experimentation due to curiosity is the key to just about all drug abuse, up to the point of dependence or addiction, after which there may be a need as well as a desire.

M-DART considers the condition which follows regular pot smoking a non-organic brain syndrome combined with a thought disorder. It can develop in two weeks or two years. Its growth is gradual, and the victim is rarely aware of the connection with his changing attitudes, feeling and thinking. There are many symptoms, with varying degrees of predisposition existing for each, but anyone is vulnerable to some extent. Factors such as age, maturity, talent or skill, dosage, mental and environmental status play a part in prognosis and results. Adjustment to and "enjoyment" of the drug more than once weekly is most significant. If it occurs, the syndrome will soon follow, though in some the effects will seem relatively mild. The heavy user's condition is far more serious, and M-DART believes there is an organic brain syndrome and cerebral atrophy as found by Dr. Campbell's team in 1972 by air encephalography.

Drug abuse education has been a farce, conducted largely by sick pot heads. The following is a near typical example extracted from a report by CWO Donald F. Methlie. He was one of 76 potential drug abuse educators, from 13 western states, Guam, Samoa, and the Department of Defense who attended a training program at San Francisco State College from July 20 to August 14, 1970. Keep in mind that this is "educators" teaching "educators" prevention and treatment of drug abuse, at taxpayers' expense (Very high level stuff):

> "On the morning of 23 July 1970, I, as a member of the Armed Forces of the United States, received what I considered the final insult to my established way of life. Dr. Loomis, Professor of Physiology, San Francisco State College, came to class dressed in pants of white, red, and blue color, and was wearing an adulteration of the flag of the United States. Loomis had his shoulder length hair parted in the center and was wearing a mustache that just sort of grew in the center of his face. He, Dr. Matzecar and John Luce, a member of the Haight-Ashbury Free Clinic, moved to the stage at the front of the room and sat at a table. Loomis then read to the class from a local newspaper. This reading, which included the use of four letter words, was nothing more than a flagrant attack on my Commander-in-Chief, the Vice President of the United States, law enforcement officials, the judicial system of the United States, and the war in Viet Nam by Loomis. One member of the class, a gentleman from Utah, actually left the room sobbing. Two representatives from Guam and at least two other members of the conference left the room. I cannot describe my emotions at seeing what I considered a desecration of my flag by the sweaty arm pits of Loomis. A short while later I introduced a resolution from the floor that Loomis and the Staff of this Training Center had gone too far in their not-too-subtle attack on the people and government of the United States. I moved that we take Loomis from the room to a nearby flag pole, place a halyark on his collar and one on the seat of his pants, raise him on the pole and see if he would flap in the wind like a flag. Dr. Cornacchia decided not to act on this resolution, but instead adjourned the class in order to let emotions settle down.
>
> "I was later requested by Dr. Cornacchia and Dr. Smith to attend an emergency meeting in an attempt 'to iron out our problems.' This meeting was attended by a cross-section of delegates. Dr. Smith advised that Loomis had acted in poor taste, and added that he was surprised as anyone to see him dressed as he was. One delegate to this meeting, a man who allegedly recently lost a son in Viet Nam, began to cry and attacked Smith and his staff for allowing Loomis to desecrate what thousands of young men had died to protect. The meeting was

very emotionally charged, and a number of delegates threatened to leave the conference if things were allowed to continue in the present vein. If we agreed on nothing else, it was that our respective organizations had sent us to this Training Center to learn all we could on drug education and not be subjected to the political and moral beliefs of Loomis and his co-workers."

You'd have to read this complete report to believe that such assininity was possible. But it was, for during the years 1968 - 1973 comparatively few "straights" worked in drug abuse. M-DART's "guesstimate" of the incidence of the Cannabis Syndrome Thought Disorder in drug abuse staff during those years is 70%.

* *

Probably 20 to 25 million of our people have been adversely affected by their pot use, and among these are members of every profession, class, age, religion, race and occupation. The following is what to look for to uncover the heavy marihuana user; lesser users will have fewer symptoms:

(1) Diminished drive, lessened ambition, decreased motivation, apathy. The waste of human potential here is tragic. Watch the PH.D pumping gas, the biologist turning to the study of ESP, the school dropout.

(2) Shortened attention and concentration span, distractibility, inability to do complex thinking, a peculiar fragmentation in the flow of thought. To see the lessened ability to learn, the failure to apply objective reason and logic, is heartrending. At the college level, our engineers and scientists might soon be in short supply.

(3) Poor judgment, general loss of effectiveness, impaired communication skills, progressive loss of insight, inability to prepare realistically for the future.

(4) Introversion, an undue pre-occupation with oneself; mystical thinking, a deep interest in eastern religion, astrology, witch-draft, ESP. Interestingly, in African and Asian cultures centuries ago, Cannabis was mother's helper, for an infant or child nibbling a certain type of cookie would be happy and occupied internally, happy all day long, wouldn't need any attention. The harm to the brain at this early age probably was irreversible, and the subsequent ability to learn tremendously impaired.

(5) Magical thinking, which is not magic as we know it, but simply means that the thought connotes the deed or act, opinion becomes fact.

(6) Regression, a slow automatic psychiatric reaction causing a return to juvenile, infantile or primitive emotion-oriented simplistic thinking and reasoning, and involving a very high degree of susceptibility to ego-protective beliefs.

(7) Rationalization, projection, and retrospective falsification, all unconscious and gradual automatic psychiatric processes which change or distort the present or past in one's mind to fill current emotional needs. The pot smoker can easily change reality 180°, as the Battle of Wounded Knee becomes the Massacre at Wounded Knee, the war in South Viet Nam becomes a "Civil War", the revisionist historian writes historical fantasy to prove how rotten the past and the system was and is.

(8) Flat affect: inappropriate or disassociated thought versus mood; a speech blockage, where talk must be very slow and measured unless it is memorized rhetoric: lessened recent memory; feelings of inadequacy and helplessness, futility, pessimism, despondency and depression.

(9) A "live now we're all gonna die soon" philosophy, an intense dislike of "straights" and others which can grow to a bitter hatred of parents, employer, government, "whitey".

(10) Unusual, weird and bizarre behavior, resulting from a combination of 4, 5, 6, & 7 of above. Could we have a Fonda, Hearst, Ellsberg, Rubin, Hoffman, Cleaver, Newton, Seale, Davis, or even Shirley MacLain otherwise? Or the SLA? Or fraggers in Viet Nam? Or MACOS? Or "flaky" pro football players?

Many "social" users experience only symptoms nos. 3, 4, 6, & 7. Symptoms disappeared, or lessened following heavy use, with cessation of pot smoking and concurrent educative, supportive, directive Reality Counselling-Therapy or its equivalent. The social users "psychosis", or denial of reality, was at times more difficult to correct than the heavy smoker's paranoia. Pot use always preceded the fixation or complex.

* *

The following conclusions and theories developed as our study progressed:

(1) Cannabis is a particularly dangerous drug because of the usually subtle and gradual adverse changes in attitude, ability and thinking caused by its regular use.

(2) Many treatment, academic and other professionals are themselves changed by personal pot smoking.

(3) These changes are not realized by the user and, in fact, many users are positive the drug helps them.

(4) An organic brain syndrome may develop from heavy regular use. Our work tended to support recent lab research finding interference in the cellular process, chromosome breakage, etc., by Drs. Nahas, Morishima, Zimmerman, Leuchtenberger, Paton, Harris, Lemberger, Campbell, Kolodny, Hall and Stenchever. Ordinarily though, we believe use as frequent as once weekly causes a non-organic brain syndrome, the word syndrome meaning a group of symptoms or pattern of behavior, a behavioral and thought disorder. Equipment should be available soon to research infant genetic organicity.

(5) Marihuana use can cause emotional, thinking or related mental and emotional disorders.

(6) In every society the past several thousand years, where cannabis or other mild or regular hallucinogenic use was "legal" or widespread, in 2 or 3 generations following introduction, the culture, no matter how advanced, seemed to deteriorate, or if primitive, remained so.

(7) One or more generations of regular pot use by the family may result in possible genetic or organic brain changes, and this condition can be studied in the laboratory. There probably are many Asian, Arab and African communities where cannabis has been used for 50 to 100 generations.

(8) Marihuana seems to lessen the activity of the left hemisphere of the brain and to enforce the operation of the right. The left deals with reason, logic, analysis, mathematics and science; and the right with talk, music, art, dance, imagination and fantasy, according to at least one theory. It is likely the hypothalamus, the signal or message center of the brain, is also affected.

(9) M-DART believes more people have the Cannabis Syndrome in the U.S. today than abuse all other drugs, including alcohol, combined.

(10) A modern free society such as ours may not survive a legalized reality distorting drug without extreme polarization between producers-achievers-realists versus romantics-talkers-dreamers.

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(11) The greatest single obstacle to successful treatment of opiate addiction may be chronic marihuana use. M-DART found this to be so.

(12) A new category of crime develops from hallucinogenic drug use, with those affected acting passionately and irrationally in the cause of peace, conservation, liberation, mankind, ecology, etc. Would you believe 20,000 bombings in the U.S. by "dissenters", 1967-1972? We found no straight revolutionaries.

(13) Much of the "research" on marihuana is done by biased users of the drug and by shallow questionnaires, interviews, or cursory lab tests. Picture one "pothead" asking another in Oregon, "Do you smoke more or less grass since it was legalized 18 months ago?" Over half said less. 27 chromosome study cultures were discarded in Jamaica because the calf serum was spoiled, or something, and they still reach conclusions using the remainder. The Costa Rica and Jamaican studies were worthless in our opinion. Yet NORML has the gall to compare a leading cytogeneticist, Dr. Stenchever, with those characters doing this highly exacting chromosome work in Jamaica. If I were financed by Playboy, perhaps my results and reporting would be dishonest also.

(14) To a large extent the polarization and alienation now present in the home, family, church, school, business, college, factory, military, government and country was caused by the Cannabis Syndrome.

(15) Certain professions teach that "drugs are not the problem, they are merely symptomatic of some other deep, underlying disorder". So long as we continue to believe outmoded theory such as this, our efforts to educate, prevent and treat may be impeded. M-DART findings indicate that drugs, including alcohol, cause the problems in 80% to 90% of cases, though of course degree of susceptibility to subsequent disorder will vary.

In a free society, we must respect opposing viewpoints. The test of "love" is not applying it to those with whom we agree, but to those with whom we differ. I doubt that most pot smokers can pass this test, for their beliefs must be self or ego-protective. It is wrong to condemn something or someone "out there" in the environment without realizing one has the duty to learn that other person's viewpoint and the reasons therefore. The recent refusal by Hopkins and Cornell Universities audiences to permit ex-Premier Ky to make a scheduled address was atrocious and indicative of the influence of the Syndrome in a free society. It has become fashionable today to attack respectable and responsible individuals, officials and institutions without any real knowledge of the facts of each issue or situation because one's ego is fed by criticizing the truly important or adopting great sounding causes. It is both ludicrous and tragic to see the 18 year old foaming at the mouth against sound pollution, the SST (Super Sonic Transport), when he has no knowledge whatever of the issue.

M-DART does not consider caffeine nor nicotine part of our drug abuse problem. Neither drug appreciably reacts on the brain; neither drug relates to mental health. We do suggest smoking in moderation if one decides to use tobacco, and do suggest that too much coffee or Pepsi Cola might stimulate kidney activity. Cigarettes probably relate to lung cancer, but if pot smokers worry about physical ailments, they should be advised that recent lab research showing Cannabis to be far more carcinogenic ties in directly with our historical studies showing relatively short lives in all societies where marihuana use was legal and widespread. Also, funny things are happening to the lungs, as in punctured or collasped, to heavy pot smokers (3 cases in the past year, average age 22).

W. D. M. Paton's comparison is excellent:

> "One may summarize this as follows: (1) Alcohol is taken, often diluted with food, and often for taste or to quench thirst rather than for psychic effect; it is eliminated in a few hours, there is little or no evidence for carcinogenicity or teratogenicity particularly if nutritional defect and correlation with smoking are allowed for; psychotic phenomena only occur after heavy and prolonged dosage: it occurs naturally in the body of animals, and probably also in man; it has valid medical uses for nutrition and as a vasodilator; it escalates only to itself; the price paid for overuse is paid in later life.
>
> "(2) Tobacco is taken partly for relaxation, partly to assist work, and there is some evidence of an improvement in mental function; the nicotine in it is rapidly metabolized and noncumulative; the evidence suggests that it is the tar that is carcinogenic, and the risk can be reduced if inhalation is avoided, nicotine being absorbed through the mouth; it is not teratogenic; no psychotic phenomena occur; it is not a natural constituent; it has no medical use; it does not escalate; the price paid for overuse is paid in later life - reducing life expectancy from about 75 years to 70 years.
>
> "(3) Cannabis is taken specifically, and usually by itself - sometimes with other drugs - for its psychic action; it is cumulative and persistent; its tar is carcinogenic and failure to inhale reduces its effect considerably; experimentally it is teratogenic; psychotic phenomena may occur with a single dose; it is not a natural constituent; prolonged trial in medicine from the 1840's led to its abandonment from pharmacopeias; it can predispose to the use of other drugs; the price for its overuse is paid in adolescence or in early life."

The recent finding that Δ 9 - THC, probably the principal ingredient in Cannabis, is soluble in fat, and remains in the body, was of interest to us. This may explain in part the less need the experienced smoker has to suck in large amounts of fumes to get his high, the so-called reverse tolerance.

Because we divide drugs of abuse into 3 categories, "ups', "downs", and "distorters", M-DART considers only the downs (opiates, barbiturates et.al., and alcohol) to be addictive. We consider that amphetamines, cocaine, pot, LSD, etc., do not have the 3 necessary properties: mental and physical dependence, and tolerance. An idiot would know the downs can be dangerous, but would he recognize adverse effects in the mildest hallucinogen? No, but parents can. The spouse can.

We have a great need in this country for an informed, open minded, objective and clear-headed citizenry. We must consider and respect each other's views, in a rational manner, before disagreement. If we close our minds to this great need of a free society, the nature of our lives could be drastically changed for the worse.

When the psychologic - sociologic history of the past decade is written, and when the part Cannabis has played is finally realized, many will be sick with shame for their failure to recognize the harm done by this so-called innocuous little weed.

The findings and conslusions of this study will represent a bitter pill for many to swallow. Many will have difficulty reading this far, for they know in their mind M-DART can't be right. The great majority of you who have enjoyed smoking dope more than several times probably have the thought disorder we described to some extent. Your need to believe ego-protective material could be pathologic. You may be totally unaware of your reality warping tendencies. Your emotional need to criticize the important, to condemn fine institutions and individuals, and to look inward and backward, to "do your own thing", may hurt those who love you most. You were hip, and they were straight of course, but you knew them to be wrong. Knew, not believed.

Perhaps, though, you are one of the many thousands swept up by the pessimistic, passionate un-reality of the past decade, one of the "herd" or "mob", a victim of the "big lie" technique. Your mind is not blocked to contradictory truth. You should expose yourself to the facts or viewpoint which would prove that an American President may not be a crook; that our goal in Asia was not to murder Vietnamese; that we may owe a great debt to American business and industry for their contributions to mankind; also to the Police, CIA, and FBI. Perhaps the faults do not lie in the system, but in each of us.

Those who succumb to the use of chemicals for pleasure in life may be leading us to regression and stagnation on a national scale. How can anyone rightfully say that man is not destined to live, work and love in his natural state? The greatest "high" comes from those we love and what we achieve, not from a weed or pill. It is not too late for a return to reality, though for many it may be. These are great times, of hope and aspiration and challenge, for all mankind. If we get the truth about marihuana to the people, the right decisions can and will be made by them.

Until we do, however, a note of caution: No one is immune to the insidious effects of marihuana. In the United States, many lawyers, politicians, bureaucrats, high government officials, federal commissioners, and even presidential candidates have been changed by pot into very "hip" people, or very "loving and caring and concerned" people. Their behavior may be unpredictable. They may lack realism. Their passion will be demagogic but appealing and contagious.

This is an interesting era.

Publication of the hundreds of longitudinal case studies hinges upon M-DART's ability to get funding. It will be a near Herculean task, with some individual charts and files from one to two inches thick. We are confident that this will somehow be accomplished, and meanwhile the study continues.

BIBLIOGRAPHY AND REFERENCES: Send request to -

M-DART - 222 E. Redwood Street - Baltimore, Maryland 21202

ENCLOSURE #2 — U.S. SENATE HUMAN RESOURCES COMMITTEE to M-DART letter 5/10/77

A PSYCHIATRIC CLASSIFICATION OF CANNABIS INTOXICATION

by **ROY H. HART**, MD, FAAPN (Dipl.)*

I. INTRODUCTION

My purpose in this paper is to offer the clinician a workable classification of the psychiatric conditions associated with cannabis intoxication. The psychonosological schema set forth here makes distinct use of the *Diagnostic and Statistical Manual*, Second Edition (1968), or DSM-II. Figure 1 depicts the classification as I employ it; and the statement is now made that each and every case of cannabis intoxication falls within this classificatory design. The function of the case illustrations (q.v.) is to show how the classification works. It has not been my aim here to write yet another clinical paper dealing with the toxic effects of cannabis on the mental system, for the medical literature is replete with these. (Some of the many articles on the subject are cited in the bibliography: References 1-75.) I had considered using the case material in that literature to illustrate the classification, but decided upon utilizing my own clinical data.

As a preliminary, certain terms, definitions and conventions are introduced at this point:

(i) Cannabis is used here as a generic term for all psychoactive preparations from *Cannabis sativa*, the hemp plant, and includes marijuana, hashish, ganja, bhang, charas, dagga, and so on. In the United States marijuana is the major *Cannabis* preparation, although hashish, about 5-10 times stronger, has been widely used by American military personnel abroad, and "hash oil," still much stronger, has been available in this country for several years (q.v.).

(ii) Since the First Report (1972) of the National Commission on Marihuana and Drug Abuse[76] is so well known, and primarily for that reason, two features of its terminology will be referred to here:

Concerning general usage, the First Report divided marijuana users into five categories, along with estimates of the numbers of people involved: (a) 24-million experimental users, who use it once per month or less frequently; (b) 7¾-million intermittent users, who use it twice to ten times per month; (c) 4½-million moderate users, who use it eleven times per month to as often as once daily; (d) ½-million heavy users, who use it several times a day; and (e) a "small fraction" of the heavy users designated as very heavy users, who are in a constant state of intoxication.

The Report also attempts to categorize users according to duration or length of use: (a) short term—less than 2 years; (b) long term—from 2-10 years; and (c) very long term—more than 10 years.

(iii) In DSM-II brain syndromes are designated as acute or chronic. Acute brain syndromes are reversible and chronic irreversible—chronic implies a "persistent organic brain syndrome."[77] In general, delirium and dementia are substitutive terms for acute and chronic brain syndrome, respectively. Cannabis dementia, or chronic brain syndrome associated with cannabis, has been described in the non-American literature to be a major consequence of cannabis use in North Africa and India.[18,78] Less well recognized in the United States, where the current cannabis experience is only a decade old, the determination of the incidence of cannabis dementia on our own shores is one of the newer challenges confronting clinical psychiatry.

Should long-term users (2-10 years) of cannabis discontinue usage, they may or may not show effects of irreversible damage (q.v.). The persistence of impaired function after discontinuation of the drug would mark the condition as a chronic brain syndrome. In cases marked by reversibility of symptoms and findings, the actual amount of irreversible damage sustained may be beyond the capacity of the clinician's measuring techniques (as well as the scientist's). It may be advisable to expand the "acute-chronic" classification of brain syndromes to include subacute and subchronic. The long-term user of cannabis with symptoms has a subchronic brain syndrome. If it clears *completely* upon cessation of use, the condition is described as reversible. If not, the former user is now suffering from a chronic brain syndrome. Short-term usage should perhaps be divided into an acute phase of less than a month's duration and a subacute stage lasting from one to several months (up to 2 years). Thus we have a

*Clinical Assistant Professor of Psychiatry, Cornell University Medical College, New York, N.Y.

Address reprint requests to: Roy H. Hart, M.D., 2 East 86th Street, New York, N.Y. 10028

brain-syndrome continuum which can be depicted as: acute—subacute—subchronic—chronic.

(iv) It is proposed that the term cannabinate (*cannabis* + suffix *-ate*) be applied to the long-term user who has terminated usage and is in the process of being evaluated for chronic (irreversible) effects or reversibility (q.v.).

(v) All the syndromes cited below can be semi-quantitated as to degree by affixing the descriptive label mild, moderate or severe, as provided for in DSM-II.

(vi) The usefulness of the marijuana-users classification of the First Report is essentially limited to providing us with estimated numbers of people involved. For practical purposes of grouping, I prefer to divide users into: (a) occasional users, and (b) regular users. The occasional user is defined as anyone using cannabis with a frequency of less than 4 times per month. This would include the experimental users and an undetermined number of the intermittent users. The regular user is here defined as anyone using marijuana at least 4 times per month, the "population in jeopardy," as I call it. The significance of the numerical cutoff is tied to the excretory pattern found in humans for cannabis. Lemberger et al.[50] have determined that it takes the body 8 days to clear itself of an i.v. test dose of delta-9-tetrahydrocannabinol (delta-9-THC, or simply THC). Therefore, any usage of more than once-a-week frequency will lead to accumulation of THC in the body's tissues (spleen, gonads, brain and lung). How much accumulation will depend upon length of use, frequency of use, and THC concentration.

(vii) The regular user "in jeopardy" can be identified if we focus attention on the three parameters just mentioned: (a) duration, (b) frequency, and (c) THC concentration.

(a) The duration of consequence is at least 2 years, i.e., long-term use. Sometimes it can be less, depending on (b) and (c).

(b) The frequency of concern is usage 4 times or more per month, meaning that such users always have some residual or stockpiled THC (or its metabolites) in their tissues.

(c) Any concentration of THC *effectively* taken into the body is a "critical" concentration—it produces an acute brain syndrome, sustains a subacute brain syndrome, or prolongs a subchronic brain syndrome. A reefer, if that is the source, with a THC content of 1%, for example, would fulfill this criterion. Such a THC concentration will produce an effective "high" in an experimental user, who will absorb 3-5 mgs of the THC present in a typical 900-mg marijuana cigarette. The quantity of THC taken into the body may run much higher in the regular smoker, perhaps 10-30 mgs—the THC content is greater. Ingested levels as high as 700 mgs per day have been reported in the literature.[51] We are not concerned with the simulated, or social, high following the smoking of what may be no more than powdered rope, where the THC concentration is 0%. Nor is this the place for a discussion of the "contact high."[52]

In view of the fact that frequency and THC concentration may be quite variable from individual to individual, even among, let us say, individuals with a two-, three-, or five-year history of cannabis consumption, clinical effects are naturally variable, leading to the advisability of employing such qualifying labels as mild, moderate, or severe (and very severe) to whatever clinical entity is being described.

(viii) Delta-9-tetrahydrocannabinol is taken to be the principal psychoactive ingredient in all cannabis preparations and as used here also includes metabolized products, such as 11-OH-THC, which may be more psychoactive.

(ix) Since the concept of organic brain syndrome is central to an understanding of the cannabis reaction, the essential features of OBS are herein stated. These syndromes are characterized by:[53]

(a) impairment of orientation
(b) memory impairment
(c) impairment of intellectual functions
(d) impaired judgement
(e) labile and shallow affect.

(x) The terms "naive" and "experienced" are sometimes encountered in the literature. "Naive" subjects are those who have never tried cannabis, and "experienced" subjects are those who would fall into the intermittent-, moderate-, and heavy-user categories. These terms are not used in this paper.

(xi) The standard abbreviation "q.v." (for *quod vide*, L., which see) is used liberally throughout this paper to alert the reader to the fact that a particular point mentioned will be discussed again.

II. THE CLASSIFICATION

The nomenclature as presented in DSM-II is on the whole adequate to serve the clinician's diagnostic needs vis-à-vis cannabis and its effects. All the clinical pictures found in cannabis intoxication fall into one or another of the categories listed in Figure 1.

(1) The regular user—and our concern after ten years of experience with cannabis in the United States is with him (or her)—is first given the diagnosis of "Drug dependence, Cannabis sativa (hashish, marihuana)," 304.5 in DSM-II. Such users become drug dependent, psychologically at least, and in a number of cases physiologically as well. The latter situation leads to an abstinence syndrome upon cessation of use, implying tolerance development—substantiated by accounts of very large increases in cannabis intake.[54]

(2) The regular user is at least suffering a "Non-psychotic OBS with other drug, poison, or systemic intoxication," 309.14 in DSM-II. In this instance, "other" refers to alcohol, and 309.13 is "Non-psychotic OBS with alcohol." Since the etiological agent has been identified as cannabis, we can shorten the label to Non-psychotic OBS (Cannabis sativa).

(3) "Psychosis with drug or poison intoxication (other than alcohol)," 294.3 in DSM-II, here shortened to "Psychosis with drug intoxication (Cannabis sativa)," is an organic brain syndrome with psychotic features. It may be an acute episode superimposed upon the natural history of the subchronic non-psychotic cannabis OBS, or it may be the appropriate diagnosis to be made during any acute or subacute cannabis intoxication. The subchronic condition of 294.3 was the diagnosis made in one of the cases presented below.

(4) The label of propfschizophrenia, schizophrenia engrafted upon an organic condition, is a useful one to employ in conjunction with certain cases of cannabis intoxication. Such an approach helps to distinguish between the symptomatology of schizophrenia and the psychotic effects stemming from marijuana use. The clinician inexperienced in the field of cannabis will, if he persists, reach the point where he can differentiate between manifestations of schizophrenic illness and those produced by cannabis (q.v.).

Usually propfschizophrenia is reserved for schizophrenia superimposed upon intellectual deficiency. I myself have employed the label when chronic alcoholism co-exists with schizophrenia.[5] Hinsie and Campbell[6] state: "It is generally considered that the disease [mental retardation] facilitates the development of the schizophrenic syndrome in a predisposed subject." The events involved may likewise be reversed; that is, a dormant schizophrenia may predispose the individual to drug-seeking behavior as a defense against the emerging process. The brain syndrome associated with cannabis in such a case is secondary to an underlying schizophrenia. With this paradigmatic approach, there should be less and less reason to continue to confuse the manifestations of cannabis psychosis with the features of schizophrenia. I make use of the term propfschizophrenia officially, placing it under "Schizophrenia, other [and unspecified] types," 295.99 in DSM-II.

Thus, multiple diagnoses can be avoided and parsimony in diagnosis maintained. However, those who prefer to categorize an individual suffering from schizophrenia plus a marijuana-induced OBS under separate labels may do so by using the code numbers for schizophrenia and cannabis OBS, with the modifiers psychotic or non-psychotic and acute, subacute, subchronic or chronic.

The proper nosological determination reflects the clinician's skill at history taking, mental status examination, and physical examination (q.v.), as well as an interest in classifying disorders.

The case presentations which follow illustrate the major diagnoses depicted above.

III. CASE ILLUSTRATIONS

The cases presented are drawn from my clinical experience at the Lower Manhattan Aftercare Clinic, a psychiatric outpatient facility of the New York State Department of Mental Hygiene; the Out-Patient Department of Payne Whitney Clinic (PWC), the psychiatric division of New York Hospital; and from my own private practice. Only the pertinent cannabis diagnosis(es) is cited for each patient, for cannabis nosology is the subject under investigation. It may be advisable for the reader to have a copy of DSM-II on hand.

Case 1.—P.D., a 24-year-old unmarried white female, came to my office complaining of anxiety and depression. The previous evening she had smoked a reefer at a party and had gotten "high." She said: "I laughed happily—it was hilarious. I couldn't remember what I was thinking or saying, and it didn't bother me. In fact, it added to the mirth." The following morning she awoke feeling anxious and depressed, enough to seek psychiatric help.

According to the First Report's classification, she was an experimental user, having smoked marijuana on only three occasions, the last one precipitating an emergency. She was given reassurance that her symptoms would clear, and they did within twenty-four hours.

Diagnosis.—Non-psychotic OBS with cannabis, acute, mild, 309.14.

Comments.—The diagnosis of acute OBS is made here because of known impairment of memory and lability of affect while under the influence of cannabis. Short-term memory was interfered with, as obtained from her history, and labile affect is demonstrated by hilarity, which then proceeded to a depressive episode. Whether the other cardinal functions involved in OBS were impaired at the time of intoxication was not determined. It should be stressed that effects noted need not be glaring to qualify as symptoms and/or signs. Any change detectable is considered clinically significant.

Case 2.—M.E., a 21-year-old white female college student, was brought to my office one evening by three of her classmates. She had smoked her first joint that evening at a party. "My high got out of control," she would later report. In the early stages of the intoxication, she felt light-headed, followed by an elevation in her mood. Following this she reported: "Objects became misshapen, waving and floating before me . . .

The people in the room were shrunken in size as though I was seeing them through the wrong end of binoculars." Then she experienced synesthesia: "I saw the sound waves from the music being played and heard the sight of flickering lights." She began laughing, and her laughter became uncontrollable. When it did not stop after a couple of hours, her friends called me for an emergency appointment.

During the car ride to my office, they had to stop to allow her out to vomit. When they arrived, the laughter had abated in intensity but remained constant. The history was obtained from her friends, who declared her a neophyte ("naive subject") to marijuana. They insisted that she had only had one joint and half a can of beer all evening. During the course of my examination, she had to go to the bathroom, and she would later describe diarrhea as a problem for the rest of that night.

O/E patient was giggling inappropriately as well as continuously, and she did not reply to questions. Her extremities were cold and pallid, and she was shivering on what was a summer's night. Axillary temperature reading was 96.8°F. Both conjunctivae were injected. Her pupils were dilated but responded to light. Her pulse was 140 and her blood pressure 140/90. Her lungs were clear to percussion and auscultation. Heart sounds, difficult to monitor against the background of sinus tachycardia, were interpreted as normal, and no murmurs were discernible. Her reflexes were brisk.

She was treated with 7.5 mgs of diazepam (Valium) intravenously. Within a few minutes the laughter terminated, and she was now able to speak. She then furnished information corroborating events as depicted by her friends. On further inquiry, she stated she had never had such a laughing spell before, and she denied any history of seizures. Upon cessation of the laughter, she complained of a headache.

She was advised to consult a neurologist for a detailed examination of the nervous system. Although she called me twice over the next three weeks to state she was feeling like her usual self, and in the process furnishing further historical data, she had not followed up on my suggestion for a neurological workup.

Diagnosis.—Psychosis with drug intoxication (cannabis), acute, severe, 294.3. [Acute psychotic OBS with cannabis.]

Comments.—The salient feature of M.E.'s intoxication was her uncontrollable laughter, which can be taken as evidence of lability of affect. Mood elevation is one of the more desired effects sought by the cannabis intoxicate. With the right *set* and *setting*, pot usually elicits laughter, mirth or hilarity and characteristically is of an infectious quality. (Giggle weed is a well-known term for marijuana.) When it becomes fatuous or uncontrollable, as in this case, it is pathological. M.E.'s laughter was reminiscent of that seen in gelastic epilepsy, or laughing epilepsy, especially in view of the fact that it appa.ently responded to intravenous diazepan.[47] The lack of follow-up corroboration deprived us of a definitive diagnosis.

As with P.D. in Case 1, there was a significant affective component to her cannabis episode. Some may wish to affix an appropriate label from DSM-II to indicate an acute or transient neurotic or psychotic affective reaction (at the expense of parsimony). I prefer to consider the demonstrated affectivity as part of the OBS picture, i.e., lability of affect. Lability is not necessarily a dramatic series of up-and-down mood swings, but may also be viewed as a definite or unusual event which is a departure from the emotional norm of a given individual.

She was aware she was unable to utter any words while intoxicated, even though she wanted to speak. "I've laughed and talked at the same time before," she said. "I don't know why I couldn't say something—anything!" Cases of mutism associated with cannabis have been reported in the literature.[48,49]

She gave a good description of object distortion: "Objects . . . waving and floating . . . ," an illusory-hallucinatory phenomenon psychotic in nature. The synesthesia—a stimulus of one sense perceived as a sensation of another sense—she experienced is a visual-auditory hallucination. Marijuana, it should be remembered, is an hallucinogen, that is to say, it can cause hallucinations, body distortions (q.v.), and phantasmogoric fantasies, which are psychotic experiences.

Everyone will experience some form of perceptual distortion in the lower or moderate THC range of 1-10 mgs., while higher doses, 10-30 mgs., will produce illusions and hallucinations. THC-induced distortions of optical and acoustical perceptions, as well as hallucinations, may result from physiological changes in the structures of the visual and acoustic pathways. Bieger and Hockman[50] have demonstrated delta-9-THC effects on lateral geniculate neurons.

After recovering her speech, she was able to relate that during the intoxication "time seemed to be forever." Like P.D. in Case 1, she, too, realized she could not keep track of her thoughts. "I was aware," she said, "that by the time I finished a sentence, I had forgotten what I had said at the beginning of the sentence. But it was fun." Again the absence of concern or anxiety over a failure in the short-term memory process.

Bilateral conjunctival injection, tachycardia, and slowing of time represent a triad of findings which invariably, when present, indicate acute cannabis intoxication. The conjunctival redness is due to vasodilatation. Cannabis-induced tachycardia may be accompanied by EKG changes.[51]

Dilatation of the pupils is not a diagnostic sign of cannabis intoxication. The pupillary muscle fibers have a double innervation from the autonomic nervous system and thus possess both a dilator and constrictor action. The bowel, like the pupil, has a sympathetic and parasympathetic innervation, and both diarrhea and constipation not inexplicably have been reported in cases of cannabis use. Peripheral vasodilatation with impairment of thermoregulation, as experienced by M.E., is described in the literature.[52]

Case 3.—A.D., a 17-year-old white male high-school student, was introduced to marijuana at the home of one of his classmates. After smoking his first joint, and his knowledgeable friends had instructed him successfully as to the proper technique, he became fearful of those present and lunged at one of his companions with a pair of scissors, yelling wildly and mistakenly referring to him by the name of a despised teacher. His friends subdued him, and two of them and his mother brought him to my office.

When first seen, he was frightened, unduly suspicious of the unfamiliar surroundings presented by my office and of my routine questions, and he accused his friends and mother of being in cahoots with his teacher to give him a lower final mark than he thought he deserved.

There were other symptoms. He said he felt his "guts are on fire and will turn hard as charcoal like in fourth-degree burns." He refused to look me in the face, because he feared I would read his thoughts and be able to control his mind. "You have the power and the evil eye," he said. "You're Adam Hart." He was alluding to a TV drama, "The Power."

O/E both eyes were injected and his mouth was dry. No odor of alcohol was detected on his breath. His pulse was 135 and his blood pressure 130/90. His hands were tremulous and a circumoral tremor was noted. His gait was unsteady, and he nearly fell several times when asked to walk a straight line heel to toe. He had a few retching episodes in my office, and he thought he had vomited somewhere and sometime that evening. "A hundred hours ago," he said dreamily. (His friends stated that he "puked all over the apartment.")

According to his companions, A.D. had not had any alcoholic beverages. His mother defended his character with the statement that he was at the top of his class and college bound on a substantial scholarship. The premorbid personality was apparently good, for I was unable to obtain any history of prior emotional disturbance from the patient and his mother.

Chlorpromazine (Thorazine), 75 mgs. intramuscularly, was administered for its anti-emetic and sedative effects more than for its antipsychotic action. His mother called me the following day to state that he had had a good night's sleep and was apparently back to normal. "He has amnesia for the stabbing incident," she mentioned. "Do you think the memory will return to haunt him?" "It's possible it was never recorded in his brain as a memory trace," I responded. "And what has not been encoded in the RNA matrices of the cerebral cortex is not part of memory." He refused to make an appointment to see me again, feeling none was necessary, and, according to his mother, he swore off "any more chemical experiences." A year later, when I was in the process of gathering my cannabis data together for publication, I learned from his mother that he had been functioning normally in the interim and was enrolled in college.

Diagnosis.—Psychosis with cannabis intoxication, acute, moderate, 294.3.

Comments.—A.D.'s acute paranoid reaction to cannabis had to be differentiated from alcoholic psychoses (291), particularly acute alcohol intoxication (291.4) and pathological intoxication (291.5). Acute alcoholism could be reasonably ruled out on the basis of history and the absence of detectable ethanol on his breath. Such misidentification accompanied by an outburst of violence, as he demonstrated, has been reported not infrequently in the literature.[53] Had A.D. succeeded in stabbing the friend he attacked, the diagnosis would have been *severe* instead of *moderate*—diagnosis modified by external reality.

It should be stressed that delusions, or false beliefs, are not pathognomonic of nor restricted to schizophrenia. I have observed them in cases of toxic and metabolic states (such as in this instance), non-OBS paranoid states, presenile and senile degeneration, generalized arteriosclerosis, general paresis, tabo-paresis, brain abscess, brain tumor, and subdural hematoma.

The paranoia involved here is not a detached functional disturbance—detached from the macromolecular brain infrastructure, to be explained selectively in psychodynamic terms, but is an organic manifestation involving misperception of an environmental stimulus explainable ultimately in terms of molecular activity. That is, the interpretation of a sensory stimulus is more meaningfully viewed as a neurophysiological process than as a pure mental activity.

Concerning his amnesia for the stabbing event, when it comes to short-term retention there is some scientific data.[54] Short-term memory is usually divided into the stages of acquisition, storage, and retrieval of information, and it is the storage phase which marijuana disrupts.

Case 4.— L.B., a 33-year-old married white male, with a 2-year-old daughter, was the forgotten offspring in a brood of five, sandwiched between two older sisters and two younger brothers. Lost in the sibling

shuffle, he always felt denied by his father. Now, as an adult, he found himself constantly being humiliated by his "Archie Bunker type" father whenever he visited his parents' home. He attributed feelings of "inadequacy and inferiority" to the fact that he was a high-school dropout. Yet he was a successful entrepreneur with the sky's-the-limit prospects.

He had been a heroin addict in his youth before undergoing a dramatic rehabilitation. He now drank a little beer socially. His cannabis history had to be plucked from him, for—as in so many of the cases I have examined—he did not consider marijuana a drug and worth mentioning. His marijuana history covered three years, and during the most recent year he had started using "hash oil," measuring out the quantity he desired with a dropper from a medicine bottle.

I saw the patient a total of four times over a seven-week period. During that span the two significant changes in his life were his entry into the therapeutic relationship and cessation of marijuana use. On his last visit he was exhilarated, stating that he had finally put his father in his place in a verbal encounter. "I'm able to think so much clearer suddenly and make the right decisions. I'm making business moves now which will make me a millionaire before my little girl starts in school."

Diagnoses.—Drug dependence, Cannabis sativa, 304.5; Non-psychotic OBS with cannabis, subchronic, mild-moderate, 309.14.

Comments.—Whatever the role psychotherapy, brief as it was, may have played in the resolution of some of L.B.'s underlying conflicts, I have noticed similar dramatic improvement in the functioning of cannabinates after as little as 4-6 weeks of marijuana abstention.

Dr. Olav Braenden,[35] Director of the U.N. Narcotics Laboratory in Geneva, examined a sample of Middle Asian marihuana oil, also known as liquid hashish and red oil, and found a THC concentration of 66.3% (Marijuana has a 1-2% THC content and hashish 5-10%.) The aficionado can now titrate his pot to his pleasure center's delight!

Case 5.—K.Z., a 26-year-old unmarried white male, was discharged less than honorably from military service after almost lasting out the three years of his voluntary enlistment. In his third year he took to drugs to escape "the frustrations of my tedium and mitigate the knowledge that mediocrity was to be my fate." Bright, interested in literature, and highly skilled as a mechanic, he resented not having been an officer and bemoaned his lack of a college education. His drug history, and there was none prior to service, included amphetamines, barbiturates, marijuana, cocaine, heroin, mescaline, psilocybin, LSD, DMT, DET, STP, yagé (containing harmine), and even the "ordeal bean" (Congolese plant containing the psychedelic alkaloid ibogaine), plus tobacco and beer, wine, and whisky. He could appropriately quote from Whittier: " 'To eat the lotus of the Nile/And drink the poppies of Cathay.' "

After his service discharge, he drifted down a desultory path, which finally led to psychiatric hospitalization for "severe depression." He began psychotherapy with me following his hospital discharge.

His marijuana intake, begun in 1969, continued during the five years of his return to civilian life. All the other drugs in his repertoire had been left behind in the rubble of his military career, all except the use of a little wine and an occasional beer. Even tobacco had been forsaken.

He showed himself to be polite, verbally expressive, possessed of humor, and considerate. Yet his existence was one of withdrawnness. He became paterfamilias to a brood of cats, while shunning human intimacy. Reared in the older school of self-reliance, he ridiculed New York's welfare program—"Sickfare which makes of grown men and women eternal children."—and began putting in long hours at night as a cabdriver. New York by day was too much for him to cope with, and he compared his "retreat into the night" with Ambrose Bierce's backturning on the United States to find "the good, kind darkness" in Mexico.

My treatment modality of psychoanalytically-oriented psychotherapy was efficacious to the extent that he did not dip into another depressive illness, and it helped keep him working regularly. Although the patient-physician relationship was solidified, he kept a tight rein on what he was prepared to parade across the stage of therapy. He liked to talk about literature and philosophy—Tolstoy, Dostoyevsky, Yevtushenko, "Mr. Nietzsche," Franz Werfel. "Intellectualizing *merde*," I would say. "Where are your own feelings in all of this?" "I'm embarrassed to talk about the dragons and krakens which inhabit my darkness," would be a typical response.

When he got around to discussing his current marijuana history in unedited version, only then were we able to define the negative play of the organic reaction upon his abortive attempts to "become like Prometheus—unchained."

He said, in a deliberately worded archaic style, "I see it so clearly now. I am become one of the lotus-eaters." The choice of metaphor carried back to an article I had written.[36] "I try to stay away from pot, but when I'm with friends I always wind up doing what they're doing: smoking a pipe [containing marijuana]. They're getting potent Colombian grass nowadays. Not the street marijuana I'm used to. This stuff packs a wallop."

"What happens to you while you're actually smoking?" I asked. He responded: "I can't even talk. I become mute as long as the pot has an effect [3-4

hours]. When I start talking, I'm aware my speech is slurred."

K.Z. now added, "I only go to pot occasionally these days." (A joke utilizing lexical ambiguity, and not an example of loosening of association.) Then he furnished critical details: "I can't do anything for days after smoking pot. I can't think or concentrate. It affects my memory. So many things I can't remember . . . I make idiotic decisions . . . I wind up loafing around doing absolutely nothing. I sleep all day and don't want to get down to the cab station. [His working hours were from 4:30 p.m. until about 1:30 or 2:30 a.m.]. I get irritable and paranoid as hell." I asked him what paranoid meant to him. "I'm suspicious," he answered. "I'm depressed. I get a very bad feeling. A very insecure feeling . . . It's a feeling of emptiness, insecurity, impermanence. Of being afraid. . . ."

He had arrived thirty minutes late for his appointment, the one yielding the above-mentioned disclosure, having slept right through into the afternoon. His mood for the next twenty minutes fluctuated bizarrely between frank depression and inappropriate elation. He had had to take a cab to get to my office: "All those people —I'm suddenly afraid of them. I couldn't even take the subway. I was even scared to leave my home and go out of doors."

As it turned out, he was at the end of an acute drug reaction to cannabis. After the abbreviated session, he sat in my waiting room while I saw my next two patients, before he felt he could go out into the street again and make the trip home. A few days later, his mind now clear, he once and for all carried out a long-planned move from his dingy apartment in a rundown neighborhood to a nicer place in a choicer location.

Diagnoses.—Drug dependence, Cannabis sativa, 304.5; Non-psychotic OBS with cannabis, subchronic, mild-moderate, 309.14, plus Psychosis with cannabis intoxication, acute, moderate, 294.3.

Comments.—Superimposed on a cannabis-OBS substratum was an acute psychotic episode caused by his latest pot-smoking experience. The latter condition cleared in a few days, and he was left with the underlying brain syndrome, characterized in his case by slight but definite memory deficits, impaired intellectual functioning, and impaired judgement. He let it be known that even when not under the *acute* influence of cannabis, he finds: "There are things I should remember but can't . . . I make the most stupid errors on the job, like miscalculating simple change. . . ."

Case 6.—S.B., a 22-year-old unmarried white female, was referred by her family physician because of depression and a history of drug abuse. During her freshman year in college, she smoked pot daily and used "so many uppers [amphetamines] and king-kong pills [barbiturates] that I finally flunked out or was thrown out or both. I can't remember exactly." She had also tried LSD, mescaline, and cocaine "a few times" while at college. Four years later, in my office, she stated that she had been smoking pot daily for two years but thought nothing of it, since "everyone knows it's harmless." She denied any other current drug use, except for "some alcoholic beverages which don't count either."

I saw her in therapy once a week for a period of ten months, and during that time she worked through a number of problems, including depression, premenstrual tension, psychogenic constipation, psychogenic backache, as well as the organic syndrome associated with cannabis use.

S.B. demonstrated the greatest degree of sensorial impairment I was to encounter in my four years of working with cannabis-using patients. She was routinely so late for her appointments during the early stage of therapy, missing a few of them entirely, that I came to count on those hours as temporal oases in my own busy schedule. Her problem: she could not track time. In addition to her grossly evident disorientation for time, she evidenced some disorientation for person and place as well.

When it came to memory, she said: "I seem to have memory holes or gaps so big you can drive a truck or at least shove an encyclopedia through them." I tried to console her with statements such as: "Marijuana interferes with memory registration, so what you think you have forgotten are experiences—taking place while you are pot smoking—which have never succeeded in being recorded." I was referring to immediate memory.[27] Her response was: "Thanks for the support. But I've forgotten too many things, like what I learned at school, and too many familiar names and places also."

While still a steady pot user, she tested poorly on intellectual functioning. She committed numerous errors on serial 7's, her comprehension of reading material was poor, and she interpreted proverbs concretely. She tried to finger her dilemma with a summarizing statement: "I just can't concentrate."

She resolved to give up the use of marijuana when she learned that quite a few clinicians did not consider it a harmless pastime, but on the contrary looked upon marijuana as a dangerous substance. Within three months she was able to say: "It's like Salome's veils being stripped away—from my mind." After six months of abstinence, most of the organicity had cleared. Two months after completing therapy, she went to Europe, and a year later I received a wedding invitation from her in France. Some six months after that, in September 1975, I did see her in Paris. She was, as she said, "fat with baby and loving every moment of it." There were still some detectable deficits in intellectual func-

tioning, orientation, and memory; but her only concern was that her child be born normal.

Diagnoses.—Drug dependence, Cannabis sativa, 304.5; Non-psychotic OBS with cannabis, subchronic, severe, 309.14, which is now considered chronic.

Comments.—A year and nine months had passed between S.B.'s completion of treatment and the time I saw her again. Perhaps after 2, 2½, or 3 years of abstinence, all deficits will be repaired. I would have to see her again to assess her progress. No semi-quantitation—mild, moderate, severe—has been employed in this instance, for the chronic state shows only slight deficits in the areas indicated, apparent to me clinically, I should stress, which may clear, stay the same, or perhaps even get worse with time, whereas the subchronic syndrome, the condition I monitored, was marked by severe sensorial dysfunction. When she stopped using marijuana, I entered her in my notebook as a cannabinate.

Some will argue that the pathogenicity of the several drugs she abused while at college contributed to her chronic OBS, and it may be so. However, most of my multiple-drug-using patients did not tarry long with the other drugs but progressed rapidly to almost exclusive marijuana usage. Evolving patterns in contemporary drug use are mentioned in the "Discussion" below.

Case 7.—R.F., a 24-year-old unmarried white male, came to therapy complaining of depression, a sense of aimlessness and lack of motivation, an "inability to get it together," trouble thinking through personal problems, and premature ejaculation.

Like S.B. in Case 6, he had failed his first year of college, living through two semesters in a perpetual stoned state via LSD, barbiturates, amphetamines, and marijuana. Now, six years later, he was drug-free—according to his criteria. He, too, discounted his use of marijuana and his newly acquired taste for whisky as drug experiences. His daily intake of marijuana was 1-2 joints or a pipeful of high-grade Colombian or Jamaican grass. Marijuana smoking had become as commonplace for him as cigarette smoking was for others, and he indulged in his habit nightly while reading the newspaper or watching TV in solitude.

Although gifted with an I.Q. of 145, he worked in his father's laundry. His attendance was unpredictable, as he slept right through much of the day on many occasions. When at work, his performance was poor, his interpersonal relationships were hampered by irritability, and his judgement so unsound as to cost the business business.

In therapy he was finally able to articulate that he indeed was having trouble thinking clearly, maintaining his concentration, and remembering recent and familiar events. When he learned that marijuana was not considered an innocuous drug by many clinicians, he cut down appreciably on his intake. There was even corroborative testimony from his parents that he had cut out all use of marijuana and alcohol. After a year, he enrolled at a local college for a few courses and did well scholastically in them. His cerebration, formerly so pitiful and sluggish, now functioned well enough for him to dismiss—completely—my role in his improvement! "Just what is it that you really did for me?" he asked disdainfully.

His "head together," he departed New York for the West and a communal farm, there to milk cows and take care of garbage, digest organic foods, and spiritualize in a religion alien to his forefathers.

Diagnoses.—Drug dependence, Cannabis sativa, 304.5; Non-psychotic OBS with cannabis, subchronic, moderate-severe, 309.14.

Comments.—In this paper I have avoided such designations as amotivational syndrome, acute paranoid reaction, and so on for clinical entities observed with cannabis, because I think all these syndromes fall more naturally within the major categories constituting the classification. The amotivational syndrome —the label some might choose for R.F.—may very well represent *a type* of Non-psychotic OBS with cannabis (309.14), just as the diagnosis of Psychophysiologic genito-urinary disorder (305.6) covers a number of disturbances, such as dyspareunia, dysmenorrhea, impotence, ejaculatio praecox, and so forth.

Irritability and reversal of the sleep cycle in cannabis users are considered important symptoms/signs of organicity, to be noted in addition to the five cardinal symptoms. Sleep reversal was a frequently reported problem amongst my patients (mentioned by 11 out of the 17 PWC and private-patient group).

The diagnosis of Subchronic non-psychotic OBS with cannabis was made for R.F., and he was written down as a cannabinate. Only long-term follow-up will determine whether his OBS is chronic or reversible.

Case 8.—J.S., a 24-year-old unmarried white male, had been a teen-age rock-and-roll success, but drugs had done him and his group in. He subsequently managed to complete three years of college, but then dropped out. At the time of beginning psychotherapy, he was working as a hospital clerk.

In the gifted range (I.Q. above 135), he gradually, in the course of his therapy, began to think of returning to college to pursue either a pre-medical program, an earlier interest, or to major in theater. Like so many of my pot-smoking patients, he was able to formulate plans only after a period of abstinence from or *critical* decrease in cannabis intake. His drug history of seven years had included LSD (3 times), marijuana, barbiturates, and some cocaine, but he had come to restrict himself to marijuana during the second half of that span.

J.S. illustrated some of the more subtle intellectual

deficits I found in cannabis users. After some five months of abstention, he felt he was functioning well again intellectually, but he was aware of deficits. A key word might elude him here and there. Distressing to him was his inability to comprehend various passages in novels he was reading. "In high school I swam through this kind of literature—I ate it up," he said. When he went to movies, he found he could not analyze various scenes, which his girlfriend would do for him. "I'm supposed to be the bright one," he said with disgust. "I'm the one, after all, who is thinking of majoring in theater!"

He interrupted therapy after twelve months to join an out-of-state acting troupe. No follow-up contact had been made at the time this paper was being prepared for publication.

Diagnoses.—Drug dependence, Cannabis sativa, 304.5; Non-psychotic OBS with cannabis, subchronic, mild-moderate, 309.14.

Comments.—The deficits he displayed in the sphere of intellection could be attributable to lingering traces of THC in the brain. Only after at least 2 years of cannabis abstention would I be prepared to consider continued evidence of intellectual impairment as the mark of irreversible damage. The "mild-moderate" designation may belie the possible seriousness of his condition should his current testable deficits not be reversed.

Case 9.—U.H., a 26-year-old unmarried white female, had a drug history dating back to her third year in high school. Her world had been pharmacocentric ever since. More to the point, she herself had been tapering off on the use of drugs, but all her friends were thoroughly involved with one drug or another. "Ninety percent of my high-school class [class of '69] were on drugs," she said. Several times I challenged her on such a high figure, but she always stuck to it. "When I go back to the old neighborhood," she said, "there are all my high-school friends, now in their middle twenties like me, still using what they did in those days. It's as though time has stood still for them or maybe passed them by." I commented that perhaps they had failed to grow with time. The drugs she listed "from the good old days" were amphetamines, barbiturates, cocaine, heroin, marijuana, and LSD.

She married a heroin addict from that group, but after a few years she and her husband separated. When she came to treatment, she was sharing an apartment with a male cousin, for financial reasons, and he was a heroin addict. Her husband had introduced her to heroin, which she mainlined for a year with him. "If you can't beat 'em, join 'em," was the reason she gave for turning on to "horse." She was quite proud over the way she kicked the habit on her own. "I never had any withdrawal reaction," she said. She had also given up marijuana. By that she meant she had ceased to be a regular user for a year or so and now was an occasional user.

At the beginning of a session in her second month of therapy, she exclaimed: "I did a rare thing for me this past week. I smoked grass, good grass, with a bunch of friends for four days. What a time! Whew! I can't handle heavy pot anymore." I asked her to describe her reaction, and she replied: "I got so paranoid. It was just unbelievable." I then wanted to know what she took to be the meaning of paranoid, and she proceeded to define, or rather illustrate, it in terms of her latest experience. "I started to shake," she said. "I got frightened. I thought my friends didn't like me. I was suspicious that they were talking about me, and I felt I wanted to hide, hide in a closet. I felt like I was inside my own body. I got upset when they started kidding me. Like they talked about having an orgy, and I freaked out over it. I couldn't communicate. I couldn't express myself." However, she was not mute, but rather she meant she found it difficult to think clearly.

Diagnosis.—Psychosis with cannabis intoxication, acute, mild, 294.3.

Comments.—U.H. was no longer cannabis dependent, so the 304.5 label is not used here. What with ideas of reference expressed and the paranoid flavoring of the intoxication, the reaction is described as psychotic rather than non-psychotic.

The fact that she, a knowledgeable cannabis user, could no longer comfortably tolerate what was formerly a manageable marijuana dose may be taken as evidence for the occurence of tolerance development. The reason I did not see withdrawal symptoms in the patients I treated was because even those who were successful in giving it up did so gradually, always with some backsliding, thus slowly yielding up their stored THC. There is an additional factor. THC, with its long storage time, is itself gradually released from the body, so even if marijuana intake is stopped suddenly, CNS stores become depleted only with time.

Concerning U.H.'s dramatic release from heroin, I have to think she kicked the habit on the elevator, as the addicts say. During her time on "harry," heroin was being sold in the New York area in such diluted form that it would lead to only a mild intoxication. Such addicts who went into the hospital for detoxification experienced withdrawal symptoms comparable to a mild bout of flu.

Case 10.—C.F., a 26-year-old unmarried black female nursing-school student, came to see me because, in her words, "I think I'm coming down with schizophrenia." She noticed that she was not thinking so clearly anymore, had difficulty concentrating, suffered memory lapses, and was alarmed and depressed over the precipitous decline in her once staunch grade-point

average. Most frightening to her were several episodes of depersonalization, when she would experience an identical self standing apart from her. During one of these experiences, she was aware that she had a severe headache but suffered no pain. "The other me had the headache," she said, and she was frightened recalling the moment.

On expanding the history, it was learned that she had taken to smoking pot during the final year of her training program. At first she smoked on weekends with friends. Then she began smoking once or twice a week with or without companionship. Finally, under the pressure of final exams, she was smoking one or two joints a night while she attempted to study. There was no history of use of other illicit drugs or prescription items.

She wanted me to prescribe chlorpromazine (Thorazine), but I found no evidence for a diagnosis of schizophrenia, and I did not think her symptomatology warranted a course with an antipsychotic agent. I recommended that she stop smoking pot completely for the next month of her life, and I did prescribe 5-10 mgs. of diazepam at bedtime, on a p.r.n. basis, since several of my patients attempting to give up marijuana were complaining of insomnia.

She followed my suggestions and a few months later called to tell me she had passed her exams, although not with the marks she had hoped for. She was much relieved that her mind was functioning normally again and that she had avoided being labeled schizophrenic.

Diagnosis.—Psychosis with cannabis intoxication, subacute, moderate-severe, 294.3.

Comments.—Depersonalization experiences were common in the patients I treated, being clearly described in 14 cases. One of my patients even spoke of his "Doppelganger" and another thought of writing a story to be called "The Two Faces of Steve." Although DSM-II does list a depersonalization neurosis (300.6), borrowed from our European colleagues, the type of depersonalization reaction encountered in C.F. and my other cannabis-using patients was of an hallucinatory nature and is considered a psychotic manifestation.

Not sophisticated in the variegated patterns of pot use as a number of my other patients, she was not cognizant of the grade of marijuana she usually smoked, which was probably low in THC content. Nevertheless, her pot use interfered considerably with the learning process, and she would later tell me that she passed her exams on what she had already learned, not on anything new she crammed in at the end.

She also provided me with what could be a useful method for gauging marijuana-induced motor impairment. "I always type my lecture and other notes," she said. "The number of errors I was making at the end of the year was unbelievable—and I used to be a high-salaried secretary."

Case 11.—L.R., a 23-year-old unmarried white male, had been hospitalized 7 times, beginning at age 17, for schizophrenia. Like J.S. in Case 8, he had been part of a successful teen-age rock-and-roll group. Each admission was good for six weeks to two or three months, when he would be loaded up with the long-acting injectable fluphenazine (Prolixin) and returned once again to society, there to struggle haplessly in an S.R.O. (single room occupancy) hotel, sporting the hospital's convenient and hastily designed insignia of paranoid schizophrenia. Decompensation would inevitably occur, as rigor follows mortis.

Closer examination into the details of his earlier illnesses revealed an overlooked theme. He would be found atop a table in a poolroom hurling balls and cues at passersby, or he would climb upon the piano in the hotel's sitting room and in a frenzy throw chairs at people, all the while screaming something like: "I can still play the drums! You haven't heard the last of me. . . ." The police would come and take him to Bellevue, where he would be loaded up with a phenothiazine for a few days before being transferred to the state hospital again. So it went.

Friends introduced him to marijuana, eventually or finally, as young friends will do these days. "I tried it, I liked it," he said laughingly. More soberly, he said, "It calms me. It's like medicine."

A discernible pattern of use now emerged and characterized his last four hospitalizations. As his ego-boundaries began to give and the psychotic process threatened to break through again, he would increase his intake of marijuana, both in quantity and frequency. Concurrently, he would show up more often for his Prolixin decanoate injections. Following hospital discharge, he could go three weeks between injections. Now the intervals would gradually shrink, to two weeks, to ten days, and then to a week. Finally the protective barrier furnished by the medication could no longer hold back the implaccable process of decompensation nor contain the psychodysleptic action of cannabis. Atop the poolroom table or perched upon the hotel piano, he would be heard shrieking: "I'm the one and only true Jesus! I'm unbelievably and fantastically powerful. There's a shining glitter that surrounds my entire body and proclaims my godhood. . . ." The police would arrive again and whisk him back to the hospital, where a phenothiazine would be pumped into him in generous quantities and the diagnosis of paranoid schizophrenia entered into his chart once more.

The case of L.R. is a fascinating one, and goes on and on. However, for the purposes of this paper I have said enough about him.

Diagnoses.—Schizophrenia, catatonic type, excited, 295.23, and Psychosis with cannabis intoxication, acute, moderate-severe, 309.14; or Propfschizophrenia, 295.99.

Comments.—The separation, or teasing out, of marijuana psychosis from schizophrenia can be effected through careful clinical examination. With L.R., the delusions of grandeur were part of the marijuana psychosis and the hyperactivity belonged with the schizophrenic illness. Such was the case with several other patients I treated.

Much of the confusion over the meaning of cannabis toxicity is to be found in the misdirected nosological effort to link cannabisism with schizophrenia, instead of seeing it for what it is: an organic brain syndrome.

Case 12.—P.G., a 25-year-old unmarried white male, avoided psychiatrists because he did not want anyone "tampering" with his homosexuality. He walked into the Aftercare Clinic one day to see a psychiatrist about another problem. "My paranoia is driving me up a wall," he complained.

Unlike ninety-nine percent of the Clinic's patients, he gave no history of hospitalization for a psychiatric disorder. He had had a problem with enuresis until the age of ten, which the family's pediatrician handled successfully. He admitted to no other psychiatric or medical problems, past or present. He pronounced his homosexuality as a sexual preference, not a disorder, in keeping with the democratic spirit of the times.

His drug profile included snorting cocaine twice, three LSD trips, and a five-year history of marijuana use. "I smoke pot three or four times a week. With friends or with my lover. Sometimes when I'm alone. Everyone's smoking it. It's harmless. Probably even good for your health."

For the past three years he was aware of a persistent paranoid trend. "I'm suspicious of everyone. Even my lover. I accuse him of having affairs with other men when I know it isn't true . . . I'm fearful. There are times I'm afraid to leave the house. I feel there are all kinds of malevolent forces outside. Sometimes it's as though they're going to break through the walls and doors and, I don't know, devour me, castrate me, cut all my hair off . . . At times I get into a panic . . . I think I hear the sounds of whispering voices coming from the walls . . . This has got to stop before I go crazy. . . ."

When I mentioned that people have been known to get paranoid on pot, he responded, "That's not paranoiac, but reality. You're always suspicious that there might be a narc around." He was quick to add: "No sense either in giving me the Freudian treatment that paranoia results from a projection of repressed homosexuality. Mine isn't repressed, and I wouldn't have it any other way."

Since he had no medical workup in his chart, we arranged for him to get a physical exam. The results confirmed that he was in good physical health. There was one intriguing finding: a pulse rate of 52. He was not an athlete, and he was surprised to learn that he was now going around with such a slow heart rate.

I suggested that he cut out marijuana for a few weeks as a trial. He returned to the clinic twice over the next six weeks, reporting a diminution in the intensity of his symptoms. He had decreased his marijuana intake to once a week, but he was not prepared to give it up altogether. Regrettably, after his third visit, he did not return again.

Diagnosis.—Psychosis with cannabis intoxication, subchronic, mild-moderate, 294.3.

Comments.—I had three opportunities to observe him and obtain historical data, which enabled me to rule out such conditions as paranoid personality, paranoid schizophrenia, and paranoia vera. Paranoid state and a non-cannabis OBS, such as associated with intracranial neoplasm, were ruled out by the partial reversibility of the condition with decreased cannabis intake.

I wish to avoid syndrome definition, as already mentioned, adhering rather to the use of the major diagnostic labels in Figure 1. However, I can see where same may wish to make a diagnosis in this case of cannabis paranoid state or perhaps cannabis paranoia. Both would be the same and would be part of 294.3.

The bradycardia is a finding reported in the literature for some long-term cannabis users.[85] Tachycardia, bilateral conjunctival injection and time slowing represent a triad I have employed successfully in diagnosing acute cannabisism (especially where cannabis use has been denied), and bradycardia, as a single finding in the long-term user, has enabled me to identify two pot smokers who had initially denied a history of cannabis use.

IV. DISCUSSION

During the four-year period from October 1972 until October 1976, I treated 59 patients who presented with a history of cannabis intake. The number is actually 61, but I have never before included P.D. and M.E. (Cases 1 and 2) in my survey. These two patients were seen by me on only one occasion and are included here to illustrate the acute type of cannabis reaction any physician in practice may be called upon to treat. All 59 patients in the survey were seen a minimum of 3 times and some were followed weekly for one or two years. The Aftercare Clinic patients were seen once or twice a month for at least six weeks to as long as three-and-a-half years.

There were 9 patients whom I saw in long-term individual psychotherapy at Payne Whitney Clinic and 8 from my own private practice involved in the can-

nabis survey. In none of these 17 was a diagnosis of schizophrenia made by me *and* a referring psychiatrist or psychologist at a teaching center, where all had had a careful screening. Of 42 cannabis-using patients at the Aftercare Clinic, 25 had a primary diagnosis of a form of schizophrenia (295), 9 were diagnosed with alcoholism (303), 4 with personality disorders (301), 3 with alcoholic psychoses (291), and 1 with psychoses associated with other physical condition (294).

My aim has not been to detail all 59 case histories in an effort to substantiate the clinical claim that marijuana is toxic to the mental system. Rather I have been concerned primarily with devising a workable system of classifying the clinical pictures associated with cannabis use which I have encountered in practice. I think clinicians will come to recognize the various cannabis reactions once they have a reasonable classificatory system in their hands. Since mine has served me well in my work, I now offer it to my colleagues, first for their comments and criticism, and then with the hope that they use it as is or modify it as deemed appropriate to the clinical facts.

A good deal of the Discussion has, in effect, been tucked into the Comments in Part III. My further statements here are, once again, for the benefit of the clinician, not necessarily for the scientist with his rigid investigatory demands. No derogation of the scientist is implied. What has been lost in today's preoccupation with science and the maze of scientific detail is the path of knowledge: the direction is from the clinical to the scientific. Where the scientific is gnarled in complex methodology, clinical medicine must stand on its own. Clinical acumen cannot be dimmed by the scientific experiment—only further illuminated.

Perhaps the most important statement to be made about cannabis is that each and every use produces a toxic state. I have yet to meet anyone, patient or otherwise, whose aim with cannabis is a state short of intoxication. In the acute state the minimum that is observed is impairment of orientation (temporal distortion), impairment of memory (registration defect), and altered affect (some degree of euphoria or dysphoria). Impairment of intellectual functions and impairment of judgement also occur, in degree, in the acute state. The non-acute state, that is, repetitions of acute usage of a frequency which lead to a subchronic condition, are also characterized by deficits or impairments in the 5 functions used to measure OBS, whether they be large or small, whether or not we have the clinical or scientific/technological skills and paraphernalia to assess them with accuracy and precision as is done so splendidly in analytical chemistry, where what is to be measured can be isolated so much more effectively. To demand of the clinician a scientific rigidity is to stifle a most productive avenue—the clinical case history—of acquiring medical knowledge.

The cannabis experience is an organic brain syndrome. This quintessential point cannot be overstressed. If parallels must be drawn, cannabis psychosis should be more appropriately compared to amphetamine psychosis or cocaine psychosis, both brain syndromes, rather than to schizophrenia, a functional disorder of unknown etiology. Nothing is gained by comparing cannabis to alcohol clinically. The former is a fat-soluble substance with a long lifetime in the body, whereas alcohol is a rapidly metabolized and water-miscible substance. Nosologically, there are psychotic alcohol reactions (291 in DSM-II) and a non-psychotic alcohol reaction, simple drunkenness (309.-13), comparable to psychosis with cannabis (294.3) and non-psychotic cannabis OBS (309.14), respectively. Alcoholism (303) is a special instance of drug dependence (304) and is nosologically comparable to Drug dependence, Cannabis sativa (304.5). Simple drunkenness, the only listed form of non-psychotic OBS with alcohol (309.13), does *not* involve psychosis. Matching it is a non-psychotic cannabis OBS. However, most pot users are looking for some distortions of reality, i.e., illusions, synesthesia, et cetera, in addition to euphoria as part of their "high." What they seek is the equivalent of acute alcohol intoxication (291.4), a psychosis. Insofar as long-term intoxication is concerned, we are now just beginning, in the United States, to study the cannabis equivalents of alcoholic Korsakov's psychosis (291.1) and alcoholic deterioration (291.5).

In my own work I have begun a process of following up on cannabinates. (See S.B., in Case 6, above.) Kolansky and Moore[29] examine former long-term users 6 months and 9 months after cessation of marijuana use to determine whether there is irreversible damage. We may find that 2 years, or a longer interval, of cannabis abstinence is necessary for determining total reversibility or partial irreversibility, especially as we improve our measuring techniques.

This study has also revealed certain changing patterns of marijuana use, as marijuana gradually works its way into the fabric of American society. Of the 59 patients I worked with, 23 (39%) stated that they will smoke pot by themselves occasionally or more frequently. Pot, like alcohol, has moved beyond being strictly a social experience or a means of furthering socialization.

Sequential experimentation and multiple-drug use, so widespread during the tumultuous introductory years of the sixties, have given way to a more selective process. Of the 59 patients, only 5 (8%) were using as many as 3 drugs: marijuana, alcohol, and cocaine (3 cases) or Valium (2 cases). Marijuana plus alcohol were being used by 43 (73%) of the population involved in the study. The consensus of the young members of the study group was that the young of the mid-seventies are switching to marijuana and alcohol with less and less interest being shown in the alpha-

collection of psychedelic drugs of the past decade. Parenthetically, with those patients who showed improvement after giving up pot, it was only cannabis that they stopped using, not alcohol, which was never consumed in addicting dosages anyway. When you withhold a drug and see improvement, you naturally associate the improvement with the stopping of the drug.

Just as cigarette smokers have flocked to "stronger" brands in the past decade, so have marijuana users progressed to the imports with higher THC yields. The ultimate has been the introduction of "hash oil," with such a high THC concentration that it is no longer worth the bother to distinguish between marijuana, hashish, bhang, charas—the THC strength of a joint or pipe is within manual control. "I don't know anyone personally who would be satisfied today with a one- or two-milligram high," said one of my patients.

As the THC content has gone up, I have heard several of my patients, after varying periods of abstention or considerably reduced use, complain of marked adverse effects upon resuming the pastime or smoking strong grass. K.Z., in Case 5, and U.H., in Case 9, were two of them. I tend to interpret such phenomena as evidence of "lost tolerance," and thus of the existence of tolerance development itself. The fact that 4 of my patients could state that they knew they were getting 25-35 mgs. of THC into their system, without experiencing distressing symptoms, is, I think, direct evidence for the development of tolerance. For a perceptive view of cannabis tolerance and withdrawal symptoms, I refer the reader to Mechoulam.[100]

Again on cannabis intoxication, I tend to agree with Kolansky and Moore[101] that everyone will succumb to a subchronic OBS when duration, frequency, and dose of cannabis are optimized. The premorbid personality then becomes an extraneous issue when compared to the individual's enzymatic capacity to metabolize THC and its active metabolites, absorption-excretory capacities, CNS membrane permeability, and so forth.

Continuing with comparisons, cannabis intoxication may be compared to carbon monoxide poisoning, where, once again, if duration of exposure, CO concentration, and single or repeated exposures are of sufficient time, degree, and number, everyone will develop a CO psychosis (294.3) or a CO non-psychotic OBS (309.14). A major difference is that carbon monoxide poisoning all too often ends in death whereas few fatalities have been recorded due to cannabis.

At the Second Opium Conference in 1924, held under the auspices of the League of Nations in Geneva, Dr. El Guindy, the delegate from Egypt, divided hashishism into acute hashishism [acute cannabisism in my terminology], characterized by crises of delirium and insanity, and chronic hashishism [chronic cannabisism], marked by both physical and mental deterioration. If we substitute psychosis for insanity, the classification is brought quite up to date. What I have done here, in essence, has been to expand the acute/chronic hashishism classification of Dr. El Guindy. *Plus ça change, plus c'est la meme chose.* (The more things change, the more they are the same.)

V. SUMMARY.

All cannabis experiences are considered organic brain syndromes, which are given the modifying labels non-psychotic or psychotic, acute, subacute, subchronic or chronic, and mild, moderate or severe. They are not to be compared to schizophrenic episodes, states, or conditions, but rather to the psychoses associated with organic brain syndromes and the non-psychotic organic brain syndromes. By trying to relate cannabis intoxication to schizophrenia, contemporary clinicians have missed the fundamental identity and significance of cannabisism as OBS. As a consequence, the entire natural history of cannabisism has been misunderstood, poorly described, and inadequately pursued therapeutically.

FIGURE 1

304.5 Drug dependence, Cannabis sativa (hashish, marihuana)
309.14 Non-psychotic OBS with other drug, poison or systemic intoxication (cannabis)
294.3 Psychosis with drug or poison intoxication (cannabis)
295.99 Schizophrenia, other [and unspecified] types—propfschizophrenia (schizophrenia + one of the above diagnosed cannabis states)

REFERENCES

1. Allentuck, S., and Bowman, K. M.: The psychotic aspects of marijuana intoxication. *Amer. J. Psychiat.* 99:248-251, 1942.
2. Ames, F.: A clinical and metabolic study of acute intoxication with Cannabis sativa and its role in the model psychoses. *J. Ment. Sci.* 104:972-999, 1958.
3. Asuni, T.: Socio-psychiatric problems of cannabis in Nigeria. *U.N. Bull. Narcotics* 16:17-28, 1964.
4. Baker, A. A., and Lucas, E. G.: Some hospital admissions associated with cannabis. *Lancet* 1:148-152, 1969.
5. Baker-Bates, E. T.: A case of Cannabis indica intoxication. *Lancet* 1:811, 1935.
6. Benabud, A.: Psycho-pathological aspects of the cannabis situation in Morocco: Statistical data for 1956. *U.N. Bull. Narc.* 9:1-16, 1957.

92-496 O - 77 - 12

7. Boroffka, A.: Mental illness and Indian hemp in Lagos. *East Afr. Med. J.* 43:377-384, 1966.
8. Bromberg, W.: Marijuana: A psychiatric study. *JAMA* 113:4-12, 1934.
9. Campbell, A. M. G., Evans, M., Thomson, J. L. G., and Williams, M. J.: Cerebral atrophy in young cannabis smokers. *Lancet* 2:1219-1224, 1971.
10. Campbell, A. M. G., Thomson, J. L., and Williams, M. J.: New research on cannabis. *Brit. Med. J.* 2:587, 5 Jun 71.
11. Campbell, D. R.: The electroencephalogram in cannabis associated psychosis. *Can. Psychiat. Ass. J.* 16:161-165, 1971.
12. Chopra, G. S., and Chopra, P. S.: Studies on 300 Indian drug addicts with special reference to psycho-social aspects, etiology and treatment. *Bull. Narc.* 17, Jun 65.
13. Chopra, G. S.: Man and marijuana. *Int. J. Addict.* 4:215-247, 1969.
14. Chopra, G. S., and Smith, J. W.: Psychotic reactions following cannabis use in East Indians. *Arch. Gen. Psychiat.* 30:24-27, 1974.
15. Chopra, R. N., and Chopra, G. S.: The present position of hemp drug addiction in India. *Ind. J. Med. Res. Mem.* 31:1-119, 1939.
16. Chopra, R. N., Chopra, G. S., and Chopra, I. C.: Cannabis sativa in relation to mental diseases and crime in India. *Ind. J. Med. Res.* 30:155-171, 1942.
17. Colbach, E.: Marijuana use by GIs in Viet Nam. *Amer. J. Psychiat.* 128:96-99, 1971.
18. Defer, B., and Diehl, M. L.: Les psychoses cannabiques aigues: A propose de 560 observations. *Ann. Med. Psychol.* 2:260-266, 1968.
19. Dhunjibhoy, J. E.: A brief resume of the types of insanity commonly met with in India, with a full description of 'India hemp insanity' peculiar to the country. *J. Ment. Sci.* 76:254-264, 1930.
20. Forney, R. B. Toxicology of marijuana. *Pharmacol. Rev.* 23:279-284, 1971.
21. Gaskill, H. S.: Marijuana, an intoxicant. *Amer. J. Psychiat.* 102:202-204, 1945.
22. Grossman, W.: Adverse reactions associated with cannabis products in India. *Ann. Int. Med.* 70:529-533, 1969.
23. Hamaker, S. T.: A case of overdose of Cannabis indica. *Ther. Gaz.* 7:808, 1891.
24. Heyndrickx, A., Scheiris, C., and Schepens, P.: Toxicological study of a fatal intoxication in man due to cannabis smoking. *J. Pharm. Belg.* 24:371-376, 1970.
25. Isbell, H.: Effects of delta-9-trans-tetrahydrocannabinol in man. *Psychopharmacologia* 11:184-188, 1967.
26. Kaplan, H. S.: Psychosis associated with marijuana. *N.Y. State J. Med.* 71:433-435, 1971.
27. Keeler, M. H.: Adverse reactions to marijuana. *Amer. J. Psychiat.* 124:674-677, 1967.
28. Keeler, M. H.: Marijuana induced hallucinations. *Dis. Nerv. Syst.* 29:314-315, 1968.
29. Keeler, M. H., Ewing, J. A., and Rouse, B. A.: Hallucinogenic effects of marijuana as currently used. *Amer. J. Psychiat.* 128:105-108, 1971.
30. Keeler, M. H., and Reifler, C. B.: Grand mal convulsions subsequent to marijuana use. *Dis. Nerv. Syst.* 28: 474-475, 1967.
31. Keeler, M. H., Reifler, C. B., and Liptzin, M. B.: Spontaneous recurrence of marijuana effect. *Amer. J. Psychiat.* 125:105-108, 1968.
32. Keup, W.: Psychotic symptoms due to cannabis abuse. *Dis. Nerv. Syst.* 31:119-126, 1970.
33. Kew, M. C., Bersohn, I., and Siew, S.: Possible hepatotoxicity of cannabis. *Lancet* 1:578-579, 1969.
34. Kolansky, H., and Moore, W. T.: Effects of marijuana on adolescents and young adults. *JAMA* 216:486-492, 1971.
35. Kolansky, H., and Moore, W. T.: Toxic effects of chronic marijuana use. *JAMA* 222:35-41, 1972.
36. Kolansky, H., and Moore, W. T.: Clinical effects of marijuana on the young. *Int. J. Psychiat.* 10:55-67, 1972.
37. Kolansky, H., and Moore, W. T.: Marijuana: Can it hurt you? *JAMA* 232:923-924, 1975.
38. Kornhaber, A.: Marijuana in an adolescent psychiatric outpatient population. *JAMA* 215:1000, 1971.
39. Lambo, T. A.: Medical and social problems of drug addiction in West Africa. *Bull. Narcotics* 17:3-14, 1965.
40. Marcovitz, E., and Myers, H. J.: The marijuana addict in the army. *War Med.* 6:382-391, 1944.
41. Marten, G. W.: Adverse reaction to the use of marijuana. *J. Tenn. Med. Ass.* 62:627-630, 1969.
42. Mayor's Committee on Marijuana: *The Marijuana Problem in the City of New York—Sociological, Medical, Psychological and Pharmacological Studies.* Cattell Press, Lancaster, Pa., 1944.
43. Melges, F. T., Tinklenberg, J. R., Hollister, L. E., and Gillespie, H. K.: Marijuana and temporal disintegration. *Science* 168 (3935):1118-1120, 1970.
44. Minter, L. J.: Indian hemp poisoning. *Brit. Med. J.* 11: 1773-1774, 1896.
45. Miras, C. J.: Experience with chronic hashish smokers. IN *Drugs and Youth*, J. R. Wittenborn, H. Brill, J. P. Smith, and S. A. Wittenborn (eds.). Charles C. Thomas, Springfield, Ill., 1969.
46. Mendelson, J. H., Meyer, R. E., and Rossi, A. M.: Behavioral and biological concomitants of chronic marijuana smoking by heavy and casual users. IN *Marijuana, A Signal of Misunderstanding*, Appendix Vol. 1, Washington, D.C., U.S. Government Printing Office, 1972, pp. 68-246.
47. Milman, D. H.: The role of marijuana in patterns of drug abuse by adolescents. *J. Pediat.* 74:283-290, 1969.
48. Milman, D. H.: Approach to the study of the effects of marijuana. *J. Pediat.* 75:342-343, 1969.
49. McMorris, S. C.: What price euphoria? The case against marijuana. *Medicolegr. J.* 34:74, 1966.
50. Peebles, A. S. M., and Mann, H. W.: Ganja assa cause of insanity and crime in Bengal. *Ind. Med. Gaz.* 49: 395-396, 1914.
51. Perna, D.: Psychotogenic effect of marijuana. *JAMA* 209:1085-1086, 1969.
52. Persyko, I.: Marijuana psychosis. *JAMA* 212:1527, 1970.
53. Pillard, R. C.: Marijuana. *N. Eng. J. Med.* 283:294-303, 1970.
54. Pond, D. A.: Psychological effects in depressive patients of the marijuana homologue synhexyl. *J. Neurol. Neurosurg. Psychiat.* 11:271-279, 1948.
55. Porot, A.: Le cannabisme. *Ann. Medicopsychol.* 1:1-24, 1942.
56. Robertson-Milne, C. J.: Hemp and insanity. *Ind. Med. Gaz.* 41:129, 1906.
57. Roland, J. L., and Teste, M.: Le cannabisme au Maroc. *Maroc. Med.* 387:694-703, 1958.
58. Russel, W.: Mental symptoms associated with the smoking of dagga. Report of an investigation conducted by the Medical Staff of Pretoria Mental Hospital. *A.M.A. of S.A.* 12:85-88, 1938.
59. Scher, J. M.: The marijuana habit. *JAMA* 214:1120, 1970.
60. Smith, D. E., and Mehl, C.: An analysis of marijuana toxicity. IN *The New Social Drug*, D. E. Smith (ed.). Prentice-Hall, Inc., Englewood Cliffs, N.J., 1970.

61. Sonnenrich, C., and Goes, J. F.: Marijuana and mental disturbance. *Neurobiologia* 25:69-91, 1962.
62. Soueif, M. I.: Hashish consumption in Egypt with special reference to psycho-social effects. *Bull. Narc.* 19:1-12, 1967.
63. Soueif, M. I.: The social psychology of cannabis consumption: myth, mystery, and fact. *Bull. Narc.* 24:1-10, 1972.
64. Spencer, D. J.: Cannabis induced psychosis. *W. Ind. Med. J.* 19:228-230, 1970.
65. Sterne, J., and Ducastaing, C.: Les arterites du Cannabis indica. *Arch. Mal. Coeur.* 53:143-147, 1960.
66. Stockings, G. T.: A new euphoriant for depressive mental states. *Brit. Med. J.* 1:918-922, 1947.
67. Talbott, J. A., and Teague, J. W.: Marijuana psychosis. *JAMA* 210:299-302, 1969.
68. Tart, C. T.: Marijuana intoxication: Common experiences. *Nature* 226 (5247):701-704,1970.
69. Tennant, F. S., and Groesbeck, C. J.: Psychiatric effects of hashish. *Arch. Gen. Psychiat.* 27:133-136, 1972.
70. Toker, E.: Mental illness in the white and Bantu populations of the Republic of South Africa. *Amer. J. Psychiat.* 123:55-65, 1966.
71. Tylden, E.: A case for cannabis? *Brit. Med. J.* 3:556, 1967.
72. Walton, R. P.: *Marijuana: America's New Drug Problem.* J. B. Lippincott Co., Philadelphia, 1938.
73. Warnoch, J.: Insanity from hasheesh. *J. Ment. Sci.* 49: 96-110, 1903.
74. West, L. J.: On the marijuana problem. IN *Psychotomimetic Drugs*, D. Efron (ed.). Raven Press, New York, 1970.
75. Wikler, A.: Clinical and social aspects of marijuana intoxication. *Arch. Gen. Psychiat.* 22:320-325, 1970.
76. *Marijuana: A Signal of Misunderstanding.* First Report of the National Commission on Marijuana and Drug Abuse, March, 1972. Superintendent of Documents, U.S. Gov't, Printing Office, Washington, D.C.
77. *Diagnostic and Statistical Manual of Mental Disorders*, Second Edition, 1968, American Psychiatric Association, Washington, D.C.
78. Nahas, G. G.: *Marijuana—Deceptive Weed.* Raven Press, New York, 1973.
79. Nahas, G. G.: *Keep Off the Grass.* Reader's Digest Press, New York, 1976.
80. Lemberger, L., Silberstein, S.D., Axeirod, J., and I. J. Kopin: Marijuana studies on the disposition and metabolism of delta-9-tetrahydrocannabinol in man. *Science* 170:1320-1322, 1970.
81. Kaymakcalan, S.: Physiological and psychological dependence on THC in Rhesus monkeys. IN *Cannabis and Its Derivatives*, W. D. M. Paton and J. Crown (eds.), Oxford Univ. Press, London, 1972, p. 145.
82. Lingeman, R. R.: *Drugs from A to Z: A Dictionary.* McGraw-Hill Book Co., New York, 1969.
83. *Diagnostic and Statistical Manual*, 1968, p. 22.
84. Paton, W. D. M., Pertwee, R. G., and Tylden, E.: Clinical aspects of cannabis action. IN *Marijuana*, R. Mechoulam (ed.), Academic Press, New York, 1973, pp. 354-355.
85. Hart, R. H.: The psychopharmacological treatment of alcoholism. *JAAPN* 1(1):17-19, 1976.
86. Hinsie, L. E., and Campbell, R. J., *Psychiatric Dictionary.* Oxford Univ. Press, New York, 1970, p. 594.
87. Gumpert, J., Hansotia, P., and Upton, A.: Gelastic epilepsy. *J. Neurol. Neurosurg. Psychiat.* 33:479-483, 1970.
88. Dinshaw, V.: Complete aphonia after ganja-smoking recovery. *Ind. Med. Rec.* 11:14, 1896.
89. Marcotte, D. B.: Marijuana and mutism. *Amer. J. Psychiat.* 129:475-477, 1972.
90. Bieger, D., and Hockman, C. H.: Differential effects produced by delta-1-tetrahydrocannabinol on lateral geniculate neurons. *Neuropharmacology* 12:269-273, 1973.
91. Mechoulam, R.: *op. cit.*
92. Ibid.
93. Culbach, E. M., and Crowe, R. R.: *Mil. Med.* 135:571, 1970.
94. Dornbush, R. L.: Marijuana and memory: Effects of smoking on storage. *Trans. N.Y. Acad. Sci.* 36:94-100, 1974.
95. Braenden, O. J.: Statement before the Senate Subcommittee on Internal Security, Sept. 18, 1972 (GE. 72-18693).
96. Hart, R. H.: History of the new drug culture. IN *A Psychiatrist Looks at Medicine: From A to Z*, Exposition Press, Jericho, N.Y., 1972.
97. Dornsbush, R. L.: *op. cit.*
98. Mechoulam, R. (ed.): op. cit., p. 322.
99. See Ref. 35.
100. Mechoulam, R. (ed.): *op. cit.*
101. See Ref. 35.

George K. Russell

Marihuana Today

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Adelphi University
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Proceedings is published periodically as a reflection of the Myrin Institute's purpose and activities. The Institute believes that a genuine reconciliation of the modern scientific attitude with a spiritual world-concept is the most essential need of modern man.

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About the Author

Dr. George K. Russell is Associate Professor of Biology at Adelphi University, Garden City, New York. A 1959 graduate of Princeton University, he was awarded a doctorate in biology by Harvard University in 1963, where he specialized in genetics, biochemistry and cellular physiology. Dr. Russell held post-doctoral fellowships from the National Science Foundation at Cornell University and Brandeis University. He taught biology at Princeton from 1965 to 1967 before joining the Adelphi faculty. At Adelphi, Dr. Russell teaches Freshman Biology, General Genetics and Molecular Biology. He is also currently engaged in research in the genetics, biochemistry and developmental physiology of *Euglena* and *Chlamydomonas* and has actively published in this field.

Preface to the Second Edition

The first edition of *Marihuana Today* was published in the spring of 1975 and had an immediate success. It is one of the most succinct yet scholarly statements available to the lay public on the physical and psychological effects of marihuana. After an initial distribution of 1,500 copies, the Myrin Institute, which had sponsored the article, was deluged by schools, churches, drug centers, civic organizations, certain branches of the armed forces and concerned parents with requests for copies.

Four printings later, because the demand was increasing rather than diminishing, the Institute had in mind to update *Marihuana Today* by including new data that had appeared since its original publication. Knowing of my enthusiasm for Dr. Russell's article and the fact that my wife and I had just completed a new book, *Sensual Drugs: Deprivation and Rehabilitation of the Mind,** in which we reviewed in detail these most recent findings on marihuana, the editors asked if I would assist in the revision. I examined the pamphlet and found that very little editing would be needed. Indeed, the only changes I recommended were brief summaries of the latest data reported at the Helsinki conference on marihuana in 1975, new findings on the drug's effects on the brain, and the possible effects on the body of the estrogen-like properties of marihuana. While there could have been extensive reporting on this and other new material, I recognized the value of keeping *Marihuana Today* short.

It is my sincere hope that the scientific findings set forth in the following pages will be sufficient to discourage the spread and use of marihuana. In the end, however, all scientific evidence, necessary as it is for a full understanding of the drug's effects, may be meaningless unless the individual user sees what is happening to him or her as a result of the drug and sincerely desires to make a change. When I have challenged my own students at Berkeley—most of whom were convinced that marihuana did not affect their performance in any way—to abandon use of the drug for a period of three months and to make careful notes on any changes they noticed in their attitude or performance, they almost invariably came back to me at the end of this time and reported in approximately these words: "You know, Professor, I wouldn't have believed it possible, but you were right. I feel as though a layer of fog has been lifted from my mind. I know that I am better focused; I can remember better; I am performing better."

If each user were to undertake a similar experiment in a conscientious way, I believe he would come to the same conclusion and would gain personal insight into the drug's effects upon him that would tally with what scientists are finding through their own clinical observations and medical research.

Dr. Hardin B. Jones
Professor of Medical Physics and Physiology
University of California, Berkeley
October, 1976

*Jones, H.B. and Jones, H.C., *Sensual Drugs: Deprivation and Rehabilitation of the Mind.* Cambridge University Press, New York, Cambridge and Sydney. (Available January 1, 1977.)

Cannabis Sativa: Background Information

Cannabis sativa, more commonly known as marihuana, Indian hemp, or hashish, is an annual, herbaceous plant and has been cultivated for centuries as a source of fiber for making rope, for the oil content of its seed and, more recently, for the intoxicating substances found in its flowering tops. In many parts of the world the plant grows as a weed and exhibits extremely rapid growth, similar to the hops plant, a related species.

There is a wide variety of cannabis preparations, depending upon the region of the world in which it is grown and used. For the most part, marihuana for use as an intoxicant is prepared from dried mature leaves, dried flowering tops and, in some cases, the entire dried plant. It is usually smoked.

Before 1964, the intoxicating properties of marihuana could not be related to a specific chemical constituent of the plant. In the past 11 years, however, the complex chemistry of marihuana has been elucidated and much information is now available. The principal psychoactive ingredient is known to be delta-9-tetrahydrocannabinol (delta-9-THC), although there are at least 50 identifiable substances present. Other constituents include delta-8-THC, cannabinol (CBN), and cannabadiol (CBD).

The identification of delta-9-THC in 1964 was the first significant breakthrough in the study of cannabis and represented an achievement similar to the isolation of morphine and heroin from the opium poppy, cocaine from coca leaves and mescaline from the peyote cactus. The identification of

delta-9-THC as the principal psychoactive component has enabled the pharmacologist and the biochemist to assess quantitatively marihuana's mode of action. Much of the early work dealing with cannabis was conducted with material that had not been assayed for active ingredients or had not been stored under optimal conditions, especially as THC is rapidly inactivated by exposure to oxygen, light, humidity and elevated temperature.

Two main types of *Cannabis sativa* have been defined according to the concentration of THC contained in their flowering tops. The fiber-type plant has low THC content (less than 0.2%), and the drug-type plant has a high THC content (2% to 7%). A 1-gram cigarette of the drug type, therefore, contains 20 to 70 milligrams of THC. Sources of cannabis found to be low in THC concentration contain high amounts of CBD and other cannabinoids.

The intake of 5 to 10 milligrams of delta-9-THC into the bloodstream is held to be sufficient to induce cannabis intoxication. Allowing for the inefficiency of inhalation, one can readily see that a single marihuana cigarette of the drug type is sufficient to induce a marihuana 'high.' A great deal of the marihuana consumed in the United States before 1970 was relatively weak and contained less than 1% THC. Much of the currently available marihuana comes from Jamaica and Colombia and has an estimated content of 3 to 4% THC, an extremely potent dosage.

Hashish is a more concentrated preparation of resinous material found in the flowering tops of *Cannabis sativa,* and may contain as much as 10% THC. Liquid hashish or "marihuana oil" with a potency of 30 to 90% THC is also available and has been characterized as "one of the most frightening drugs on the market today."[49]

As defined by the National Commission on Marihuana in 1972, the following terms apply to the use of cannabis: *Intermittent* users employ the drug from twice a month to once a week; *moderate* users, once a week to daily; *heavy* (chronic) users, once to several times daily.

Marihuana Today

1. Introduction

Eight or nine years ago when the use of drugs became increasingly prevalent on college campuses in this country, many of my students asked my opinion about marihuana. At that time, without more scientific evidence at my disposal, I could not pretend to speak factually about the effects of this subtle and complex drug on the human mind and on the various aspects of bodily health. I did urge my science students, however, to bear in mind that among pharmacologists there is general agreement that a drug must be presumed harmful until proven otherwise.

In order to respond to my students' questions in a responsible and scientific manner I subsequently undertook a thorough survey of the medical literature. The many scientific journals that I studied showed a solid body of clinical and experimental data warranting an extremely cautious approach to the drug. In reviewing these data I was struck by the fact that almost none of this information had reached the general public, and that, as a result, many held marihuana to be harmless.

To bridge the communications gap that clearly exists between the scientific community and the public, a clear summary of recent findings seemed in order, detailed enough to present a meaningful picture, but short enough to be readily understandable. In the following article, I have tried to provide such a summary, both for my students and for the many others who are seriously concerned about the effects of this drug.

Since 1969, when the Federal Government began making marihuana of controlled quality available to research scientists,

reliable evidence of marihuana's effects has accumulated at a rapid pace. These seven years of research have provided strong indications that the drug in its various forms is far more hazardous than was originally suspected. In fact, eminent scientists from around the world agree that, based on recent findings, marihuana must be considered a very dangerous drug. Several of these scientists have gone so far as to state that they consider cannabis the most dangerous drug on the market today.

Available findings suggest that the effects of marihuana are cumulative and dose-related, and that prolonged use of marihuana, or less frequent use of the more potent hashish, is associated with at least six different types of hazards. Senator Eastland, Chairman of the Internal Security Subcommittee of the United States Senate, summarized testimony given before the Subcommittee in May, 1974, by a distinguished body of internationally-known medical researchers in the following way:

> 1)—THC, the principal psychoactive factor in cannabis, tends to accumulate in the brain and gonads and other fatty tissues in the manner of DDT. . . .
> 2)—Marihuana, even when used in moderate amounts, causes massive damage to the entire cellular process. . . .
> 3)—Tied in with its tendency to accumulate in the brain and its capacity for cellular damage, there is a growing body of evidence that marihuana inflicts irreversible damage on the brain, including actual brain atrophy, when used in a chronic manner for several years. . . .
> 4)—There is also a growing body of evidence that marihuana adversely affects the reproductive process in a number of ways, and that it poses a serious danger of genetic damage and even of genetic mutation. . . .
> 5)—Chronic cannabis smoking can produce sinusitis, pharyngitis, bronchitis, emphysema and other respiratory difficulties in a year or less, as opposed to ten or twenty years of cigarette smoking to produce comparable complications. . . .
> 6)—Cannabis smoke, or cannabis smoke mixed with cigarette smoke, is far more damaging to lung tissues than tobacco smoke alone. The damage done is described as 'precancerous.' . . .

> 7)—Chronic cannabis use results in deterioration of mental functioning, pathological forms of thinking resembling paranoia, and a "massive and chronic passivity" and lack of motivation—the so-called 'amotivational syndrome.' . . .[48]

There can be no doubt that in the past few years this country has been caught in a cannabis epidemic. The amount of marihuana seized by federal authorities has risen from 85,715 pounds in 1968 to 783,000 pounds in 1973; similarly, the amount of hashish seized has escalated from 534 pounds in 1968 to 53,000 pounds in 1973. These are alarming quantities when you consider that a pound of marihuana can intoxicate almost 200 people, while a pound of hashish can intoxicate eight times as many. Moreover, officials estimate that roughly eight pounds of each drug reaches users for every one pound seized. Thus, close to 7 million pounds of marihuana and hashish may have been consumed in the United States in 1973—enough to make more than 2 billion cigarettes! In 1974, the amount of marihuana that federal authorities seized jumped almost threefold over the previous year to 2,009,000 pounds—a startling rise for a one-year period—while the amount of hashish decreased slightly to 51,000 pounds.[49]

This massive escalation in the quantities of marihuana and hashish consumed has been paralleled by a continuing escalation in the potency of cannabis preparations since the mid-1960's. Before 1970, most of the marihuana consumed in this country was of domestic origin, which is low in THC content—1/5 of 1% and under.[78] This fact among others would help to explain why many observers in the early years came to the conclusion that it was not seriously damaging. By 1970, Mexican marihuana had replaced the domestic variety, and enjoyed a virtual monopoly in the American market over the next few years. The average potency of the Mexican marihuana entering the country during this time is estimated to have been between 1.5 and 2% THC.[78] Around the end of 1973, Jamaican and Colombian marihuana, with an estimated potency of 3 to 4% entered this country in increasing quantities.[32] In addition, federal authorities began to seize increasing amounts of liquid hashish or "marihuana oil" with a potency ranging from 30 to 90% THC. At an average potency of 50%

THC, an ounce of "oil" is enough to intoxicate over 1,000 people. In 1974, 369 pounds were seized.[32]

Commenting on the tremendous increase in both the quantity and potency of cannabis imports into the United States, Andrew C. Tartaglino, Acting Deputy Administrator of the Drug Enforcement Administration, told the Senate Subcommittee Hearing that: "The traffic in and abuse of marihuana products has taken a more serious turn in the last two or three years than either the courts, the news media, or the public is aware. The shift is clearly toward the abuse of stronger, more dangerous forms of the drug, which renders much of what has been said in the 1960's about the harmlessness of its use obsolete."[75]

At a 1975 Hearing before the same Senate Subcommittee, Dr. Robert L. DuPont, Director of the National Institute on Drug Abuse, cited new evidence of the use of marihuana by large numbers of very young individuals.

> A 1974 survey found that in one high-use county in California, 22 percent of the seventh grade boys and 18 percent of seventh grade girls reported having used marihuana at least once during the preceding year; and that its use with 11th and 12th grade boys exceeded that of tobacco. A survey of a national sample of 23-year-old men in 1974 found that almost 10 percent reported smoking marihuana daily during the preceding year. In this group, the daily use of marihuana grew from under 3 percent 4 years earlier and nearly equalled the daily use of alcohol, which was 14 percent. . . . A federally funded 1974 national survey has been completed which shows that the number of adults ever using marihuana has remained rather stable from 1971 to 1974—15 percent to 18 percent—but that there has been some significant increases in use among the 16 to 25 age group during this same period—14 percent to 22 percent.[14]

Dr. DuPont commented that these trends, which show that a large and growing minority use the drug more frequently, at a higher potency, and at a younger age, disturb "even the most optimistic observers of the contemporary marihuana scene in this country."[14] He adds that medical findings of the

past three years raise "doubts about the harmlessness of smoking marihuana even in low doses."[14]

Equally significant and, according to DuPont, "one of the saddest lessons of the last few years" is the fact that "there is not a tradeoff between [marihuana and alcohol]" as many once thought. "Parents would say, 'Well, if Johnny is smoking grass, he will not be drinking booze.' Unfortunately, the evidence is exactly the contrary. We have found that these behaviors are linked behaviors, so that the consumption of any substance, licit or illicit, is positively correlated with an increased consumption of all other substances."[14]

One of the major factors that has encouraged widespread use of marihuana has been the one-sided publicity given statements of scientists and lay spokesmen advocating a more tolerant attitude toward the drug. Conversely, there has been a virtual blackout, until recently, of scientific writings pointing to its dangers. In a recent report Keith Cowan, governmental advisor to the Canadian province of Prince Edward Island, commented on the one-sided treatment of the cannabis issue:

> The sad truth is that highly important and cautionary evidence has been available for years in the literature and in the experience of prominent medical men who have treated cannabis habitués. But it has not reached our youth and the public in any effective way as yet. . . . On a recent trip to England I searched bookstores associated with the University of London and the University of Oxford. Excepting one book, the only books openly available gave cannabis a basically clean bill of health. One document stated succinctly that science had not established that marihuana was as harmful as tobacco. . . . Visits to five other universities on the U.S. eastern seaboard brought the communication gap home even more seriously. In one major university, I thoroughly investigated the literature in the bookstores, and every single drug study was favorable to cannabis. The dean of students told me that while they were observing ill effects on students using the drug in increasing numbers, they had no confirmation in the general literature and were therefore silent.[11]

Thus, books like Lester Grinspoon's *Marihuana Reconsidered*[20] and the Consumers Union's *Licit and Illicit Drugs*,[5] both of which took the stand that marihuana was not seriously dangerous and could therefore be legalized, received favorable reviews and the authors were invited to appear on numerous television talk shows. In contrast, the book *Marihuana—Deceptive Weed*[57] by Gabriel G. Nahas, a distinguished medical scientist with numerous publications and a long-standing reputation, was ignored, although it had been presented to the appropriate press and magazine outlets with excellent references by numerous scientific authorities. Also ignored were the warnings concerning marihuana's potential harm made in 1972 by Dr. Olav J. Braenden, Director of the United Nations Narcotics Laboratory in Geneva. Based on his own experience and the experience of 26 cooperating laboratories in various parts of the world, Braenden stated that there was a general consensus among scientists working in the field that marihuana is a dangerous drug.[4]

Another case in point is the publicity surrounding the first report of the National Commission on Marihuana and Drug Abuse. According to Henry Brill, one of the Commission members, many misinterpretations resulted from stressing reassuring passages in the report and ignoring the final conclusions and recommendations, as well as the passages in the report on which they were based:

> From my knowledge of the proceedings of the Commission, I can reaffirm that the report and the subsequent statements by the Commission meant exactly what they said, namely, that the drug should not be legalized, that control measures for trafficking in the drug were necessary and should be continued, and that use of this drug should be discouraged because of its potential hazards. . . .
> Scientific reports which have become available since the report was written confirm still further the need for caution. . . . In general the effects of the drug continue to be noted as subtle and insidious. . . . I may add that in my own view marihuana must still be classed as a dangerous drug, dangerous to enough people to warrant full control.[7]

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Because of this strange imbalance in publicity, intelligent people have been under the impression that the bulk of the scientific community considers marihuana to be innocuous. This is not so. Many scientists are coming forward with significant data attesting to the drug's adverse effects, and many of their findings overlap and mutually support one another. In addition to Drs. Braenden and Nahas, these scientists include Professor W.D.M. Paton of Oxford University, who heads the British drug research program and is one of the world's leading pharmacologists; Professor Nils Bejerot of Sweden, perhaps the ranking international expert on the epidemiology of drug abuse; Professor M.I. Soueif of Egypt, author of the classic study on the consequences of hashish addiction in his country; Professor Robert G. Heath, Chairman of the Department of Psychiatry and Neurology at Tulane University Medical School; Professor Morton A. Stenchever, Chairman of the Department of Obstetrics and Gynecology at the University of Utah Medical School; Dr. Julius Axelrod, Nobel Prize winning researcher of the National Institute of Mental Health; Dr. Hardin B. Jones, Professor of Medical Physics and Physiology at the University of California, Berkeley; Dr. D. Harvey Powelson, head of the Psychiatric Division of the Student Health Service at Berkeley between 1964 and 1972; Dr. Henry Brill, senior psychiatric member of the National Commission on Marihuana and President of the American Psychopathological Association; and others.

It is significant that two of these men, Heath and Powelson, had once leaned toward a tolerant attitude on marihuana, but were later compelled by their findings to revise their views. Thus, although Heath originally shared the belief that marihuana was a relatively innocent drug producing relaxation with no significant side-effects, he has since concluded that it is highly dangerous.[25] Powelson, whose extensive exposure at Berkeley over eight years makes him probably the most experienced campus psychiatrist in the country, has said that when the marihuana epidemic first broke in 1965 and 1966, he had adopted a lenient stance toward the drug, based on the then almost universal assumption that marihuana was not seriously harmful. As a result of his extensive clinical experience, however, his attitude toward marihuana has changed to the point that he now considers it the most dangerous drug with which the

United States must contend. Powelson summarized the psychological effects of cannabis in the following way:

> 1)—Its early use is beguiling. It gives the illusion of feeling good. The user is not aware of the beginning loss of mental functioning. I have never seen an exception to the observation that marihuana impairs the user's ability to judge the loss of his own mental functioning.
> 2)—After one to three years of continuous use the ability to think has become so impaired that pathological forms of thinking begin to take over the entire thought process.
> 3)—Chronic heavy use leads to paranoid thinking.
> 4)—Chronic heavy use leads to deterioration in body and mental functioning which is difficult and perhaps impossible to reverse.
> 5)—Its use leads to a delusional system of thinking which has inherent in it the strong need to seduce and proselytize others. I have rarely seen a regular marihuana user who wasn't 'pushing.' As these people move into government, the professions, and the media, it is not surprising that they continue as 'pushers,' thus adding to the confusion that [the scientific community is obliged] to ameliorate.[67]

The following sections will consider the specific ways in which cannabis affects mental and physical health. It is perhaps fitting to begin with a review of some of the first experimental work with delta-9-THC, and of the controversy that has surrounded the marihuana question ever since. The point at issue was then, and is still, whether marihuana should be deemed a soft recreational drug, or whether it must be regarded as a dangerous substance calling for strict control.

2. Mild Intoxicant or Hallucinogenic Drug?

The first experimental study with pure delta-9-THC was made in 1967 by the West German pharmacologist Dr. H. Isbell and his colleagues, who showed that the physical and psychological effects of cannabis were related to the dose administered; they confirmed the older observations of the French physician, Jacques Moreau,[53] concerning the hallucinogenic properties of the drug. Isbell concluded his study as follows: "The data in our experiments definitely indicate that the psychotomimetic* effects of delta-9-THC are dependent on dosage and that sufficiently high doses (15-20 mg. smoked, 20-60 mg. ingested) can cause psychotic reactions in any individual."[31] Isbell classified cannabis among the hallucinogens.

On the other hand, studies by Dr. Andrew T. Weil of Harvard Medical School[80] and by Alfred Crancer, Jr. and colleagues[12] indicated that cannabis was a 'mild intoxicant' which produced effects not related to dosage and which did not impair, and in certain instances even improved, the performance of chronic users in selected tests.

With the publication of these three studies, the great marihuana debate in the United States began. Is cannabis a hallucinogen? Or is it a mild intoxicant when used in a dosage likely to be taken by habitual users in the population at large? In coming to terms with this crucial question, it will be necessary to scrutinize the evidence supporting the two contradictory positions.

The laboratory study conducted by Weil made use of marihuana cigarettes containing what were thought to be doses of 4.5 to 18 mg. of delta-9-THC. In this study non-users smoking marihuana for the first time experienced a few subjective effects, demonstrated impaired performance on simple intellectual and manual dexterity tests, showed moderate acceleration of heart-beat (not dose-related) and exhibited reddening of the eyes. Experienced marihuana users exhibited increases in heart rate higher than those observed in non-users (also not dose-related), reported a subjective 'high,' and showed slight improvement of their performance on the tests.

On the basis of these observations, Weil concluded that "marihuana is a relatively mild intoxicant."[79,80] Weil's paper

*Capable of inducing altered states of consciousness.

was published in *Science* magazine, was extensively quoted in an article on marihuana in *Scientific American* by the Harvard psychiatrist, Lester Grinspoon,[19] and was the subject of a feature article on the front page of the *New York Times*. His paper, with the attendant publicity it received, was read by many and contributed to the widely held belief in the United States that marihuana is a relatively harmless substance with few untoward effects.

It is now apparent that the actual dose of psychoactive material absorbed by the subjects in the Weil study must have been quite low. All subsequent studies by other investigators in which the delta-9-THC concentration was accurately measured indicate that the doses purportedly used by Weil produce much more significant impairment of psychomotor performance and much greater dose-dependent increases in heart rate. Weil's cannabis, inadequately assayed for THC content, had probably undergone considerable decay due to the well-known instability of THC between the time of preparation and its actual use in his experiments. In commenting on this point, Dr. Leo E. Hollister of the Veterans Administration Hospital, Palo Alto, California, reported that many of his own cannabis samples had only 10% of the alleged THC content, under conditions of aging similar to Weil's.[29]

A similar criticism can be made of the simulated driving study of Crancer, also published in *Science* and quoted in part in *Scientific American*. Driving skills of volunteer subjects were tested with a driving simulator after the volunteers had consumed large amounts of alcohol or had smoked two marihuana cigarettes containing supposed doses of 22 mg. delta-9-THC. In the studies of Isbell reported two years earlier, an actual assayed dose of this amount produced "hallucinations, depersonalization, and derealization." In the Crancer study, under conditions of supposed marihuana intoxication, speedometer errors were increased (the subjects did not watch the speedometer carefully), but driving ability was not otherwise impaired. Acceleration, braking, signalling, steering and total errors were unaffected. In contrast, profound impairment was observed with the large doses of alcohol administered. Crancer concluded that "impairment in simulated driving performance is not a function of increased marihuana dosage or inexperience with the drug." He did not discuss the discrepancy between

his study and that of Isbell. However, he was careful *not* to state that the use of marihuana will not impair actual driving on the highway, or that it is safer to use than alcohol.

But some of the readers of his paper were less cautious. Grinspoon, discussing the Crancer paper, stated, "It was found that marihuana causes significantly less impairment of driving ability than alcohol does."[19] Grinspoon also relied heavily on the studies of Weil and Crancer in his book *Marihuana Reconsidered,* where he asserted that, "if an habitual or relatively frequent user had a specific task to carry out, he would be able to do so as effectively while experiencing a 'social marihuana high' as he would if he were entirely drug-free, and in some cases he may perform more efficiently or accurately."[20] This book was hailed by the *New York Times Book Review* as presenting "the best dope on pot so far."

In his pioneering study of the effects of delta-9-THC on human subjects, Isbell used chemically prepared and assayed material. Doses of 4 and 18 mg. smoked, or 8 to 35 mg. ingested, were accompanied by marked distortion of visual and auditory perception, lost sense of reality, depersonalization and, in some instances, hallucinations. Isbell also found that the physical and psychological changes experienced by each subject were directly proportional to the amount of THC consumed.

The observations of Isbell on the adverse effects of delta-9-THC on mental performance have been substantiated by subsequent well-controlled studies,[16] whose findings cast still more doubt on the validity of the results described by Weil and Crancer. One such example is the careful, well-controlled study undertaken in 1974 of driving in city traffic after smoking both high and low doses of marihuana.[36] This study showed that the drug had a dose-dependent adverse effect on driving performance. Forty-two percent of those on low doses (4.9 mg. THC per cigarette) and 63% of those on higher doses (8.4 mg. THC per cigarette) showed a decline in their driving ability after smoking one marihuana cigarette. Unusual behavior included "the missing of traffic lights or stop signs; . . . passing maneuvers without sufficient caution; poor anticipation or poor handling of vehicle with respect to traffic flow; [and] unawareness or inappropriate awareness of pedestrians or stationary vehicles. . . ."[36] The use of marihuana in conjunction with alcohol was also shown to reinforce the adverse effects

on performance of some motor tasks.[47] Other studies confirm that marihuana definitely impairs driving ability.[35] An increase in the accident rate among marihuana users is also beginning to show up in the records of emergency treatment centers.[32]

It is probable that the absence of untoward effects of cannabis reported in the studies of Weil and Crancer was caused by the highly reduced amounts of delta-9-THC in the material they used. Unlike Isbell and others, each failed to assay his material accurately by independently-calibrated techniques at the time of the actual experiment.

Weil and Crancer published their findings in 1968 and 1969. Their papers are by no means the only or the most recent contributions to the exculpatory literature. I have already mentioned Grinspoon's *Marihuana Reconsidered,* and *Licit and Illicit Drugs* by Edward M. Brecher and the editors of Consumer Reports. In the March 1975 issue of Consumer Reports, Brecher returns to the subject with an article entitled *Marijuana: The Health Questions.* The article reviews the case against marihuana, and then goes on to cite contradictory evidence that seemingly gives the lie to many of the conclusions reached by the Senate Internal Security Subcommittee on the basis of the testimony presented before it. Brecher does not assert that marihuana is harmless; on the contrary, "no drug is safe or harmless to all people at all dosage levels or under all conditions of use."[6] But out of all the available evidence, he believes,

> . . . a general pattern is beginning to emerge. When a research finding can be readily checked—either by repeating the experiment or by devising a better one—an allegation of adverse marijuana effects is relatively short-lived. No damage is found—and after a time the allegation is dropped (often to be replaced by allegations of some other kind of damage due to marijuana).[6]

The evidence Brecher marshalls in support of this contention comes from a number of different sources. Key to his argument, however, is the so-called Jamaica study. Reasoning that effects of marihuana consumption predicted in this country on the basis of laboratory research should be readily evident in societies that have used cannabis for generations, the National

Institute of Mental Health in 1970 commissioned the Research Institute for the Study of Man to study marihuana use on the island of Jamaica. Marihuana, or ganja as it is known there, was introduced into Jamaica in the 17th century as a possible source of fiber. It is estimated that something under ten percent of the population uses ganja regularly, either in cigarettes or as tea.[22]

Following a period of research in the field, the six anthropologists who conducted the study selected a group of 30 ganja smokers and a control group of 30 non-smokers to undergo physical and psychological testing at University Hospital of the University of the West Indies. The tests included lung X-rays, brain-wave recordings, chromosome studies, and a battery of psychiatric and psychological examinations aimed at uncovering evidence of emotional disturbance or brain damage. No significant differences were found between the ganja users and the controls, leading the researchers to give marihuana the nearest thing to a clean bill of health.

Taken at face value, those are certainly impressive findings. But how do they agree with the findings of others who have had extensive clinical experience in Jamaica? In his testimony before the Senate Subcommittee on Internal Security Dr. Henry Brill, a member of the National Commission on Marihuana and Drug Abuse, drew attention to the conflicting evidence from Jamaica:

> Finally, one should note the comment from Jamaica in the West Indies where the effects of cannabis had been thought to be relatively benign; among the middle class it is now found to be associated with school dropouts, transient psychoses, panic states, and adolescent behavior disorders. In general the effects of the drug continue to be noted as subtle and insidious.[7]

Dr. John A.S. Hall, since 1965 Chairman of the Department of Medicine at Kingston Hospital, Jamaica, has had unparalleled opportunity for first-hand observation. He reports:

> 1)—An emphysema-bronchitis syndrome, common among Indian laborers of a past generation, who were well known for their ganja smoking habits, is

> now a well-established present day finding among black male laborers [in Jamaica].
> 2)—Ganja has long been regarded both by the laity and the profession as a cause of psychosis in Jamaica. The unrivaled, accumulated experience of Cooke, Royes, and Williams, who were in recent years senior medical officers at Bellevue Hospital, in Kingston, Jamaica, fully substantiate this.
> 3)—An incidence of 20 percent impotence as a presenting feature among males who have smoked ganja for 5 or more years, was reported by me earlier.
> 4)—Personality changes among ganja smokers and members of the Rastafari cult are a matter of common observation in Jamaica. The apathy, the retreat from reality, the incapacity or unwillingness for sustained concentration, and the lifetime of drifting are best summed up in the 'amotivational syndrome' of McGlothin & West.[22]

When confronted with conflicting evidence of such proportions, the conscientious reporter digs deeper. He then soon discovers that the Jamaica study suffered from numerous scientific-methodological shortcomings. The chromosome study technique, for instance, was so deficient that 27 of the 60 cell cultures did not grow at all and could not be scored; other methodological deficiencies were so extensive as to render the results meaningless. Standard lung X-rays are an important diagnostic test for many pulmonary disorders, but they do not reveal the emphysema-bronchitis syndrome which has been so widely attributed to heavy marihuana use. And, as we shall see later, it has already been clearly established that the standard scalp electroencephalograms that were taken during the Jamaica study are incapable of detecting the cannabis-induced brain-wave abnormalities that have been recorded by electrodes implanted deep within the brain.

When he was asked to comment on the seemingly paradoxical results of the Jamaica study, Hall had this to say:

> The study to which you refer does not have the general support of experienced clinicians and other workers in the field. We believe that the selection with which the study was done was faulty and that in regard to

> the reported absence of any change in the chromosome pattern that their technique was faulty and that certainly as regards the statement that there was no respiratory effect, it is unfounded.[22]

In his article, Brecher makes much of the difficulty he encountered in obtaining a copy of the Jamaica study report. The report has not been released by the sponsoring government agency, and Consumers Union finally secured a copy from Holland. Perhaps the explanation for this so extraordinary unavailability is to be found in the value placed on the study by those who, like Dr. Hall, have the professional qualifications to assess its worth.

Brecher's argument does not rest exclusively on the findings of the Jamaica study, and I will have occasion to comment on some of his other evidence in the course of the following sections, which deal with the effects of cannabis on the various members of the human constitution.

3. The Psyche

The psychological effects of chronic cannabis consumption are familiar to most clinicians who have treated cannabis users and, for that matter, to lay observers who have had any extended acquaintance with cannabis habitués. These effects have perhaps been best described by Drs. Harold Kolansky and William T. Moore, two Philadelphia psychiatrists affiliated with the University of Pennsylvania, who conducted one of the first well-documented studies of the effects of cannabis on the human psyche.

Between 1965 and 1974, Kolansky and Moore treated hundreds of patients where the use of marihuana was in the foreground of the clinical picture.[52] They described their findings with 60 of these patients in several publications. A 1971 report in the *Journal of the American Medical Association*[37] dealt with 38 young people ranging in age from 13 to 24 years, all of whom smoked marihuana two or more times weekly, and in general smoked two or more marihuana cigarettes each time, and all of whom showed adverse psychological symptoms. In a follow-up study of an older group,[38] Kolansky and Moore examined 13 adults from 20 to 41 years of age, all of whom smoked cannabis products intensively (three to ten times per week) for a period of 16 months to 6 years.

As their purpose was to determine the impact of cannabis on the psyche, those included in the studies were carefully screened. The mental status of each prior to cannabis use was established by means of a thorough psychiatric history and examination. Anyone who displayed psychological problems before smoking cannabis was eliminated; only those were retained in whom no evidence was found of a predisposition to mental illness prior to the development of psychopathological symptoms once the smoking of cannabis had begun. It was also ascertained that these individuals had used only marihuana and/or hashish to the exclusion of other drugs—with the exception of five from the older group who had used additional drugs, but to such a limited extent that it was unlikely to account for their symptomology.

The most striking feature of Kolansky and Moore's studies—and a feature corroborated by the experience of other clinicians—was the uniformity of the symptoms they observed.

Cannabis usage appeared to exert a corroding effect on the will power of the individual, as well as on his emotions and on his ability to think. Of particular concern was the pronounced impairment of intellectual and emotional maturation in many of the younger patients.

The patients typically displayed a goallessness or serious loss of motivation. They were apathetic and sluggish in both mental and physical responses. Most were physically thin and often appeared "so tired that they simulated the weariness and resignation of the aged. All appeared older than their chronological age, an impression that was sometimes reinforced by slowed physical movement."[37] Kolansky and Moore attributed such slow motion to a combination of "emotional lethargy and a slowing of the sense of time,"[37] the latter being a common illusion among marihuana smokers. There was usually a loss of interest in personal cleanliness, grooming and dress, this characteristic being at times present in patients prior to smoking, but always markedly accentuated following the onset of smoking. These symptoms have come to be known as the 'amotivational syndrome,' a syndrome described by Bejerot as "a massive and chronic passivity brought about by prolonged and intensive abuse of cannabis."[3]

Mental confusion, poor concentration and a difficulty with concept formation and recent memory were also common symptoms. Many had trouble converting thoughts into words, which resulted in a rambling, disjointed flow of speech. In fact, Kolansky and Moore noted that "memorized phrases were frequently substituted to mask the loss of speech and thought continuity."[37] Steadily declining academic ability and class standing were also common and in direct proportion to the frequency and amount of smoking.

Three case histories drawn from Kolansky and Moore's work illustrate several of these points:

> —A 19-year-old college freshman arrived on time for psychiatric consultation, dressed in old, torn, dirty clothes. He was unkempt, with long hair that was uncombed and disheveled. He talked in a slow hesitant manner, frequently losing his train of thought, and he could not pay attention or concentrate. He tried hard to both talk and listen, but had difficulty with both. He had been an excellent high-school

athlete, and the highest [ranking] student in his class in a large city. He was described as neat, orderly, and taking pride in his appearance, intellect and physical fitness. During the last half of his senior year, he began casual (one or two marihuana cigarettes each weekend) smoking. By the time of the evaluation in the middle of his first college year, he was smoking several marihuana cigarettes daily. While in college, he stopped attending classes, didn't know what his goals were, and was flunking all subjects. He partook in no athletic or social events, and was planning to drop out of college to live in a young, drug-oriented group.[37]

—Shortly after a 14-year-old boy began to smoke marihuana, he began to demonstrate indolence, apathy, and depression. Over a period of eight months, his condition worsened until he began to hallucinate and to develop paranoid ideas. Simultaneously, he became actively homosexual. There was no evidence of psychiatric illness prior to smoking marihuana and hashish. At the height of his paranoid delusions, he attempted suicide by jumping from a moving car he had stolen. He was arrested, and during his probation period, he stopped smoking and his paranoid ideation disappeared. In two six-month follow-up examinations, he was still showing some memory impairment and difficulty in concentration. Of note was the fact that he still complained of an alteration in time sense and distortion of depth perception at the time of his most recent examination.[37]

—A 19-year-old boy entered college with an 'A' average. He began smoking marihuana early in the freshman year, and within two months of starting to smoke cannabis, he became apathetic, disoriented, and depressed. At the semester's end, he had failed all courses and lacked judgment in most other matters. Upon return to his home, he discontinued marihuana after a total period of three and a half months of smoking. Gradually, his apathy disappeared, his motivation returned, and his personal appearance improved. He found employment, and in the following academic year, he enrolled at a different university as a preprofessional student. His motivation re-

> turned, as did his capability. As with so many of our patients, this young man told his psychiatrist that he had observed changes while smoking marihuana; he even went to a college counselor and told the counselor that he felt he was having a thinking problem due to smoking marihuana. The counselor reassured him that the drug was harmless and that there was no medical evidence of difficulties as a consequence of smoking.[37]

In many patients, the tendency toward so-called magical thinking and a basically altered sense of reality was frequently observed, and often included symptoms of marked paranoia. Typical of the latter were delusions of grandeur and omnipotence. A 17-year-old boy, for example, who subsequently attempted suicide, developed "an interest in occult matters which culminated in the delusion that he was to be the Messiah returned to earth."[37] A 20-year-old man "developed delusions of omnipotence and grandeur six months after starting to smoke marihuana. He believed that he was in charge of the Mafia and that he was an Eastern potentate of the Ku Klux Klan. He began to collect guns and knives in addition to training his German shepherd dog to attack others."[37] An 18-year-old boy who smoked marihuana and hashish regularly for a three-year period "became progressively withdrawn, confused and depressed. His interest in astrology and eastern religions increased. He became a vegetarian and practiced yoga. He had the delusion that he was a guru and eventually believed that he was the son of God who was placed on earth to save all people from violence and destruction."[37] Still another, a 19-year-old boy who smoked marihuana for four months, believed "he had superhuman mental powers," and felt that "he was able to communicate with and control the minds and actions of animals, especially dogs and cats. . . . His most closely guarded secret was the belief that he was the Messiah, and although he believed this to be a 'weird idea,' he felt it to be true and thought that marihuana gave him this power."[37]

Kolansky and Moore observed that the use of cannabis derivatives in each of these cases "caused such severe decompensation of the ego that it became necessary for the ego to develop a delusional system in an attempt to restore a new form of reality."[37]

Another aspect of paranoia that appeared to be typical of cannabis users was a constant suspicion and distrust of others. Two case histories illustrate this point:

> —A 16-year-old girl in whom there was no prior psychiatric difficulty smoked cannabis derivatives (marihuana and hashish) at first occasionally, and then three to four times weekly for a period of two years. She began to lose interest in academic work and became preoccupied with political issues. From a quiet and socially popular girl, she became hostile and quite impulsive in her inappropriate verbal attacks on teachers and peers. She dropped out of school in her senior year of high school, which led to psychiatric referral. She showed inappropriate affect and developed paranoid ideas about an older sister's husband having sexual interests in her. She refused to give up smoking marihuana and eventually became so depressed that she attempted suicide by hanging. After withdrawal from the drug, her depression and paranoid ideas slowly disappeared, as did her outbursts of aggression. Ten months of follow-up showed continued impairment of memory and thought disorder, marked by her complaint that she could not concentrate on her studies and could not transform her thoughts into either written or spoken words as she had once been able to do quite easily.[37]
>
> —A married 24-year-old man who had shown no previous psychiatric illness or evidence of personality disorder met a group of new friends who taught him to smoke marihuana. He enjoyed the experience so much that he smoked it daily for two months, claiming it did not interfere with his daily functioning. He even said that he could think more clearly. Gradually he began to withdraw from his friends and seemed suspicious of them. He developed ideas of reference, believing that his friends talked about him saying that he was impotent. (Impotence had actually occurred on several occasions after he had smoked a large amount of 'good hash.') He also believed he was developing heart disease as a result of 'bad drugs.' He had experienced palpitations and a feeling of his heart 'jumping' in his throat on several occasions while smoking some Mexican marihuana. He believed

> that his friends were trying to do away with him in order to have his wife. At the end of two months, he showed a full-blown paranoid psychosis and had delusions of grandeur. He believed that he had developed a superior intellect at the expense of a loss of his sexual life. He was the first member of a new 'super race.' After stopping his smoking, his delusional ideas disappeared and he returned to his normal functioning in his job and marriage.[38]

According to Kolansky and Moore, many of the long-term marihuana smokers who develop paranoid delusions appear able to function for a period of time "without others being aware of their illness, either because they join groups who share their aberrational thinking or because they keep their delusional thoughts to themselves."[37]

In the course of cannabis use, emotional disorders also seem to develop. Among patients examined by Kolansky and Moore, a considerable "flattening of affect" gave a "false impression of calm and well-being; this was usually accompanied by the patients' conviction that they had recently developed emotional maturity and insight aided by cannabis. This pseudo-equanimity was easily disrupted, however, if the patients were questioned about their personality change, new philosophy, and drug consumption; or if their supplies of cannabis were threatened,"[37] so that irritability and outbursts of aggression were not uncommon. Many also showed an impairment in the control of their own impulses and judgment, and an inability to distinguish the subtleties of the feelings of others in social situations. Moreover, most of the patients admitted to a growing sense of isolation from others and a desire to shun social activities, as well as a deep-seated feeling of anxiety and depression.

Finally, sexual promiscuity was a frequent feature of cannabis use, and the incidence of unwanted pregnancies among female patients was high, as was the incidence of venereal disease. From the initial group of 38, 13 female individuals, all unmarried and ranging in age from 13 to 22, showed "an unusual degree of sexual promiscuity, which ranged from sexual relations with several individuals of the opposite sex to relations with individuals of the same sex, individuals of both sexes, and sometimes, individuals of both sexes on the same evening."[37]

In the histories of each of these 13 individuals, Kolansky and Moore were struck by "the loss of sexual inhibitions after short periods of marihuana smoking."[37] Seven of this group became pregnant (one on several occasions), and four developed venereal diseases.

> Each showed confusion, apathy, depression, suicidal ideas, inappropriateness of affect, listlessness, feelings of isolation, and disturbances in reality testing, and among the 13, all of whom attended junior high school, high school, or college . . . a marked drop in academic performance. . . . In no instance was there sexual promiscuity prior to the beginning of marihuana smoking, and in only two of the 13 cases were there histories of mild anxiety states prior to smoking.[37]

Kolansky and Moore take these results as an indication of marihuana's effect on "loosening the superego controls and altering superego ideals."[37] A common pattern observed by other clinicians is that sexual activity is heightened for only a short period in early marihuana use and that with continued use diminishes steadily. It is not unusual to find a complete absence of sexual activity in habitual marihuana smokers.[35]

It should be noted here that the severity of each of the above symptoms varied in different individuals. Thus, 8 of the 38 young patients suffered from marked psychosis, while 6 others suffered a milder form of ego decompensation. Symptoms ranged in effect from mild ego disturbance to severe psychosis in individuals who showed no ego fragility, predisposition toward psychosis, or suicidal tendencies prior to taking marihuana. Suicide was actually attempted by four of the most seriously disturbed. It appears characteristic of cannabis use that the severity of its effect is unpredictable and that an acute psychotic reaction can occur in a mentally healthy individual from even a single dose. Drs. Clark and Nakashima, who used marihuana extracts orally on volunteer subjects never before exposed to cannabis in order to study its impact on their discriminatory and retentive faculties, concluded that it was impossible to predict the range of marihuana's effect on different individuals, or on the same individual at different times and in different circumstances."[10]

In the course of their research, Kolansky and Moore established the fact that the symptoms demonstrated by their patients began with cannabis use and disappeared or were reduced within 3 to 24 months of abstention from the drug. This, coupled with the stereotypical nature of these symptoms, led them to hypothesize that the psychic changes they observed were actually caused by physical ones—the direct or indirect chemical effect of cannabis on the brain. They suggested that a toxic agent—cannabis—produced transient biochemical changes and, in more extreme instances, permanent structural changes in the central nervous system, possibly the cerebral cortex; and that these, in turn, triggered the symptoms of psychic aberration typical of cannabis habitués. This subject is examined in greater detail in the next section.

While Kolansky and Moore were among the first to take issue with the widely-held view that marihuana is a mild intoxicant causing serious psychological disturbances only in rare cases, they are by no means the only clinicians to have done so. Others have corroborated their observations in independent studies, and have come to similar conclusions. Among them are Dr. Hardin B. Jones of the University of California at Berkeley[33] and Dr. Leo Hollister of the Veterans Administration Research Hospital in Palo Alto, California.[29] Jones reported to the Senate Subcommittee on Internal Security that cannabis users "persistently show a pattern of undesirably altered mental functions":

> 1)—They use *non sequitur* in speech—that is, their conclusions do not follow from their premises—and they preferentially accept *non sequitur* from others.
> 2)—They are easily induced into risky, impetuous and foolish behavior, such as acceptance of heroin, LSD, and other dangerous drugs, and homosexual experience, which are later regretted.
> 3)—There is a narrowing of the usually wide range of facial expressions that reflect the complexity of thought formation; the habitual facial expression tends to become a mask.
> 4)—There are gaps and abrupt transitions in expressing their thoughts.
> 5)—There is usually pallor of the face and almost no changes of color with the emotions of social

> discourse; blushing is reduced or absent altogether. 6)—Weakening of short-term memory often appears in conversations; significant points comprehended early in the conversation escape a few minutes later.[33]

Hollister found that cannabis impairs short-term memory and the ability to complete thoughts during conversations.[30]

A recent study even reversed the conclusions of an earlier study by the same investigators that had failed to demonstrate any adverse effects from cannabis use. Two years ago, Drs. Jack H. Mendelson and Roger E. Meyer of Harvard Medical School's Alcohol and Drug Abuse Center at McLean Hospital, Belmont, Massachusetts, reported that they observed no evidence of the so-called amotivational syndrome in 20 experienced cannabis users who were kept in a research ward for 21 days.[51] The subjects were permitted to earn money and cannabis cigarettes—up to an established limit—by participating in certain tests. Mendelson and Meyer found no indications at that time of decreased motivation to work and no discernible effects on the ability to improve mental performance or motor function.

In subsequent experiments of a similar nature—in which, however, there was no limit on the amount of money and cannabis that could be earned—certain individuals did show a marked dose-related decrease in motivation and performance on the tests. This was especially apparent, they stated, among the light and moderate cannabis users.[51]

A clinician who has been in a unique position to observe the effects of marihuana is Dr. D. Harvey Powelson, whose findings strongly substantiate those of Kolansky and Moore. Powelson was chief of the Department of Psychiatry in the Student Health Service at the University of California in Berkeley in 1965, the first year of the student riots and also the first year that marihuana and other hallucinogens were becoming widely used on college and university campuses across the country. Between 1965 and 1972, his psychiatric clinic saw between 2000 and 3000 students a year, approximately 150 to 200 of whom were mentally ill enough to be hospitalized. Powelson himself personally interviewed 200 students a year, some for a single hour, others as much as two or three times a week for varying lengths of time up to five years. The remaining

students were examined by clinicians under his direct supervision.

While Powelson had initially taken the stand that marihuana is a harmless drug, he was compelled by his findings to reverse his views. The first important shift in his thinking occurred as the result of observations made during psychotherapy with a young man, S., who was "bright enough to be getting his law degree and Ph.D. simultaneously and competent enough to be learning to fly and deal in real estate at the same time."[67] During the course of extended observations, Powelson came to know how S. thought—how he used or misused logic, whether or not he exercised good judgment, how well and accurately his memory worked. And in the course of therapy, Powelson began to recognize symptoms attributable to cannabis use:

> Periodically, we had hours (I was seeing him twice weekly) when his thinking became mushy. If I tried to follow him, my head began to spin. When I protested that he'd become impossible to listen to, he'd argue that his own experience was that he was thinking more clearly, more insightfully, than ever. On one such occasion, he mentioned that he'd been to a party two nights before where he'd had particularly good 'grass.' In Berkeley, 1968, that was not a particularly memorable remark, but we thought there might be some connection with his thinking. This same series of events recurred often enough so that I finally was able at times to post dict that S. had had some 'mind-expanding drug,' usually marihuana."[67]

Like Kolansky and Moore, Powelson found that cannabis exacerbated the pathological aspects of thinking. Paranoia, for instance, was central to S.'s difficulties. Thus, when S. had indulged in marihuana, he became more mistrustful of Powelson and was forever "talking about his search for something or someone he could trust."[67] Simultaneously, he became adept at fooling himself about what he was up to. When his thinking was particularly confused, he claimed that he had attained clarity and insight; when he evidenced suspicion and distrust, he maintained how 'loving' and 'in touch' he was.

As Powelson became familiar with the effects of cannabis on S., he learned to detect its more subtle symptoms. He also came to observe similar symptoms in numerous other individuals. The essence of the pattern he noted was that small amounts of marihuana (approximately three 'joints' of street grade) interfered with memory and a sense of time. Regular use of marihuana caused increased distortions in thinking—"the user's field of interest gets narrower and narrower as he focuses his attention on immediate sensation."[67] As he consumes more of the drug, his ability to think sequentially diminishes; he becomes inadequate in areas where "judgment, memory and logic are necessary."[67] As this occurs, he develops pathological patterns of thinking. "Ultimately, all heavy users (i.e. daily users) develop a 'paranoid' way of thinking."[67]

Like Kolansky and Moore, Powelson points to the possibility that cannabis may cause permanent damage to the user:

> A frequent story is that the young person has become aware that the life he's been leading is unsatisfactory and unproductive. He then stops drugs for six months or so and reenters the university. When he returns to school, however, he finds that he can't think clearly and that, in ways he finds difficult to describe, he can't use his mind in the way he did before. Such people also seem to be aware that they've lost their will someplace, that to do something, to do anything, requires a gigantic effort—in short, they have become will-less—what we call anomic.[67]

He cites the case of a patient who was a junior faculty member at Berkeley. After dropping out, he used cannabis exclusively for 18 months in daily doses. When he realized that the drug was affecting his physical coordination, he stopped taking it and two years later returned to the University to work.

> He told me that he could no longer handle mathematics at his prior level. He simply couldn't follow the arguments anymore. Today, three and a half years later, he still cannot. He is convinced that the change is permanent and was drug-induced.[68]

Louis J. West of the Department of Psychiatry, Neurology and Behavioral Sciences at the University of Oklahoma

Medical Center, has observed the same kind of individual stagnation in cannabis users that has been described by other clinicians; he, too, suggests that it may be due to a "biochemical scarring of the brain":

> There are many young people, including some of the brightest, who have been using marihuana now more or less regularly for three to four years. Addiction or even habituation is denied. The smoking is said to be simply for pleasure. Untoward effects are usually (not always) denied. But the experienced clinician observes in many of these individuals personality changes that may grow subtly over long periods of time: diminished drive, lessened ambition, decreased motivation, apathy, shortened attention span, distractibility, poor judgment, impaired communication skills, less effectiveness, magical thinking, derealization, depersonalization, diminished capacity to carry out complex plans or prepare realistically for the future, a peculiar fragmentation in the flow of thought, habit deterioration and progressive loss of insight. There is a clinical impression of organicity to this syndrome that I simply cannot explain away. There are too many instances of youngsters who should be getting their Ph.D.'s by now who are drifting along smoking marihuana and gradually developing these symptoms. Some of them at least are not schizophrenic, not psychopathic, not avitaminotic, not using other drugs, not simply 'dropping out' by choice. And a few of the brightest ones will even tell you, "I can't even read a book from cover to cover and grasp its meaning anymore. I tell myself that I really don't care what's in it; that their topics are not important. But I really can't do it. Of course, I really don't care."[81]

Many individuals who have reviewed the literature recognize the considerable dangers to the human psyche of chronic marihuana use. There exists, nevertheless, a widely held view that moderate consumption does not pose a particular threat. Indeed, moderate use of cannabis is often equated with occasional use of alcohol.

In answer to this point, Dr. Franz E. Winkler, a private practitioner and author of one of the first articles pointing to marihuana's hazards, wrote the following:

> The lasting effects of moderate amounts of alcohol are minimal in contrast to the harmful effects of even a couple of reefers a week. . . . An early effect of marijuana and hashish use is a progressive loss of will power, already noticeable to the trained observer after about six weeks of moderate use. This loss of will power weakens the ability to resist coercion, so that marijuana users too often fall victim to hard drug pushers, extortionists and deviates. Soon all ability for real joy disappears, to be replaced by the noisy pretense of fun. While healthy teenagers will eagerly participate in all kinds of activities, such as sports, hiking, artistic endeavors, etc., a marijuana user will show an increasing tendency to talk aimlessly of great goals, while doing nothing about them.[83]

Winkler's early observations are remarkably consistent with the careful accounts of many practicing clinicians who have repeatedly drawn attention to evidence of personality change after fairly short periods of cannabis consumption. To be sure, the accounts of Kolansky and Moore, Powelson, Jones, West and others deal with obvious, and in many cases very extreme, aberrations following prolonged use of cannabis, but a recurring theme in many of the clinical accounts is that subtle evidence of personality disintegration from moderate use is evident to a trained observer long before the more advanced symptoms have appeared.

In the past few years, it has been shown that cannabis has a direct affinity for the brain, giving weight to the hypothesis of organic damage by West, Powelson, Kolansky, Moore and others. The following section will deal with the biological effects of cannabis on this organ.

4. The Brain

There is no doubt that cannabis has a number of short-term effects on the brain—it could not be psychoactive if it did not. The consequences of these short-term effects are as yet uncertain; however, there is significant evidence that continuation over a period of time can produce organic and therefore permanent brain damage.

According to Dr. W.D.M. Paton, Professor of Pharmacology at Oxford University, the various cannabinoid substances are highly soluble in fat, but have a low solubility in water.[64] Because of this fat solubility, which is exceeded only by substances such as DDT, cannabinoids can be expected to persist in the human body for a considerable period of time, and to accumulate with repeated exposure. In addition, the fat solubility makes it likely that the substances build up in nervous tissue, with its relatively high content of fatty materials.

Experimental findings have supported these contentions. The intravenous injection of radioactively-tagged delta-9-THC into laboratory rats, for example, has shown that the substance concentrates primarily in body fat, but also in the liver, lungs, reproductive organs and in the brain. THC was detected in these animals two weeks after a single injection.[41,64] Cannabinoids are not 'washed out' of the body shortly after consumption as are alcohol and its metabolic by-products, for example. An individual smoking even one marihuana cigarette a week is never free of the drug.

There is little experimental evidence dealing with the actual concentrations of THC in various organs of the human body, but there is reason to believe, based on knowledge of DDT accumulation, that the concentrations may attain high levels.

Experiments with animals have demonstrated that the toxicity of delta-9-THC also tends to be cumulative. Thus, if it is administered in very small doses, the total amount of THC needed to kill a mouse is only one-tenth of what would be needed in a single dose.[64] Cannabis is unique among drugs such as LSD and the opiates for its cumulative action.

Related to its toxicity and its tendency to accumulate in the brain is a growing body of evidence that regular marihuana use results in irreversible brain damage. Dr. Robert G. Heath,

Chairman of the Department of Psychiatry and Neurology at Tulane University Medical School, studied the effects of cannabis inhalation on electroencephalographic (EEG) patterns in rhesus monkeys. Heath demonstrated with objective measurements of brain wave patterns that the intake of less than two marihuana cigarettes a week for three months (a total of only 20 marihuana cigarettes!) caused serious, and quite possibly permanent, alteration of brain function in these experimental animals.

In these tests, one group of animals was made to inhale cannabis smoke three times daily, five times a week, for six months (heavy dosage level); a second group inhaled somewhat less than two marihuana cigarettes a week for six months (moderate dosage); a third group received daily intravenous injections of delta-9-THC for six months. Control animals received cannabis smoke devoid of THC. Brain wave patterns were monitored regularly during the six-months test period.

According to the testimony given by Heath at the Senate Subcommittee Hearings,

> 1)—I am reporting to you that the smoke of active marihuana induced in rhesus monkeys consistent and distinct changes in [brain-wave] recordings from specific deep brain sites in association with behavioral alterations.
> 2)—You can see under the acute effects of marihuana smoke changes in many sites. The amygdala, septal and hippocampus show the most pronounced changes and these are brain areas where activity has been correlated with various specific emotional states. The septal region is the site for pleasure—stimulating it activates pleasure feelings. When its activity is impaired, as it is in schizophrenia, you have a lack of pleasure and a reduction of awareness towards a sleepy, dreamy state. The changes we found with marihuana, in some ways, resemble the changes we recorded from schizophrenics.
> 3)—When the monkeys were regularly exposed to these drugs, at both moderate and heavy dose levels, persistent—perhaps irreversible—alterations developed in brain function at specific deep sites where recording activity has been correlated with emotional responsivity, alerting and sensory perception.[25]

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Heath's testimony explicitly states that monkeys exposed to less than two marihuana cigarettes per week "began to show irreversible alteration in brain function about 3 months after onset of the experiment."[25] In describing the persistent brain wave alterations, Heath commented as follows:

> It was interesting to us that these distinct and persistent brain alterations were temporarily corrected, being replaced by a different type of altered brain activity, when the animals were again exposed to the marihuana smoke. This phenomenon suggested that the marihuana had induced permanent changes of a type that could be temporarily alleviated by acute exposure, seemingly paralleling the well-known pattern of a drug-dependent person who gains temporary relief from deprivation by taking more of the drug.[25]

In these studies, Heath monitored brain-wave patterns using detecting electrodes imbedded deeply in various regions of the brain. Highly abnormal patterns were seen in several deeper regions. However, surface (scalp) electrodes applied to monkeys receiving even the high dosage levels of cannabis smoke did not show *any* abnormalities. As Heath testified, "I again cite the impotence of physiological techniques of only scalp recordings used routinely on human subjects. That is the reason, of course, that people report often that there are no changes in brain functions. They use a scalp EEG, a technique which is unable to pick up these changes."[25]

Heath's findings were challenged before the Senate Subcommittee by Dr. Julius Axelrod, 1970 Nobel Prize winner in neurophysiology, who felt that their significance was beclouded by what he considered were the enormous overdoses of marihuana that Heath administered to his monkeys: ". . . the doses he has given for the acute effect, for example, would be equivalent to smoking 100 marijuana cigarettes. . . . And the amount he has given for the chronic effect represents smoking 30 marijuana cigarettes three times a day for a period of six months."[1]

Even Nobel laureates occasionally are mistaken, and this was one such occasion, as Heath demonstrated by supplying the Subcommittee with the data from his experiments. The actual dosage level of heavily-dosed monkeys was 53.7 mg.

delta-9-THC per month per kilogram of body weight of the monkeys. This value, although high, is still less than the 80-160 mg. of delta-9-THC per month per kilogram of body weight ingested by many of the hashish users studied in West Germany by Dr. Forrest S. Tennant and described later in this article. Moderately-dosed monkeys received 5.5 mg. delta-9-THC per month per kilogram of body weight, a level that corresponds to human consumption of about one marihuana cigarette per day.[26]

What is of interest about this exchange is that Brecher, in his recent Consumer Reports article,[6] quotes Axelrod at length to discredit Heath's findings. However, Brecher chooses to remain silent about Heath's rebuttal, even though reference to it is made on the same page of the hearings transcript as the Axelrod statement which he quotes. The data obtained by Heath correlate with and support the observations of the many other researchers and clinicians who have found evidence of organic brain damage caused by cannabis; they stand as powerful and enduring testimony to the dangers of marihuana use.

In his report to the Senate Subcommittee, Heath commented on the differences between marihuana and alcohol as follows:

> Alcohol does not get in and directly affect brain function as the cannabis preparations do. They have a strikingly different physiological effect on the brain. Of course, alcohol does affect the liver and it has been shown objectively with many recent experiments that it ultimately can affect the brain, but you can use alcohol for a long period of time without producing any sort of persistent damage. People might drink rather heavily for 25 to 30 years and never get into serious trouble so far as alterations in the brain are concerned. But with marihuana, it seems as though you have to use it only for a relatively short time in moderate to heavy use before persistent behavior effects along with other evidence of brain damage begin to develop. . . . As data accumulate, they are beginning to confirm what many of us have suspected from clinical experience with marihuana users; namely that [marihuana] produces distinctive and irreversible changes in the brain.[25]

A very important study was conducted in 1971 by the late Dr. A.M.G. Campbell of the Royal United Hospital, Bristol, England, in which he demonstrated that chronic marihuana smokers aged 18 to 26 had suffered as much brain atrophy as is normally encountered in very elderly people.[8] Campbell and his colleagues performed air encephalography, a type of X-ray procedure in which air is injected into the cavities of the brain, on ten young men who had used cannabis consistently over a period of 3 to 11 years. Each of the ten subjects displayed severe personality changes, including memory loss of recent events, hallucinations, a reversal of sleep rhythms, and other mental effects. Comparison with air encephalograms of carefully matched control subjects indicated that the brains of the cannabis users had physically atrophied. While similar conditions may be seen in Parkinson's disease, arteriosclerosis and in the atrophy of old age, cerebral atrophy occurs only in rare cases in young people. Since none of the patients displayed clear evidence of any conditions prior to cannabis use that might cause degeneration of brain tissue, Campbell concluded that "regular use of cannabis produces cerebral atrophy in young adults."[8] The specific regions of the brain showing marked atrophy in Campbell's study were just those areas where radioactively labelled delta-9-THC had been shown to accumulate after intravenous injection in experimental monkeys.[46]

Some investigators have taken issue with Campbell's conclusions,[39] because several of the ten subjects had used amphetamines and/or LSD in addition to cannabis. Campbell emphasized, however, that although these substances had been taken, cannabis was the predominant drug in all cases. In addition, Campbell's findings have been strongly corroborated by the work of Heath cited above. The particular regions of the brain where Campbell detected evidence of cerebral atrophy were just those areas in which Heath measured the most pronounced and persistent changes in brain function by electroencephalography. It must be added that a very recent follow-up study by Heath has confirmed and extended his earlier findings reported to the Senate Subcommittee.[27] Electron miscroscopic study of the monkey brains eight months after the last exposure to marihuana smoke showed definite evidence of brain cell degeneration in those regions of the brain where the abnormal EEG

patterns were noted. The concurrence of Heath's findings with those of Campbell is highly significant.

Additional evidence has accumulated concerning the effects of marihuana on the brain. Dr. Peter A. Fried of Carlton University, Ottawa, Canada, has found that young rats subjected to cannabis smoke not only suffered from generally reduced body weight, but also had significantly smaller hearts and brains as a percentage of their total body weight.[2] The fact that Dr. Fried got approximately similar results with young suckling rats whose mothers were exposed to marihuana smoke strongly suggests the transmission of marihuana products, quite possibly THC, through the mother's milk to the offspring.[17] Dr. Harold Kalant of the Department of Pharmacology at the University of Toronto has found that rats exposed to marihuana smoke for five months' time suffered an irreversible loss of learning ability as measured by standard psychological tests.[15]

There is no doubt that the observations of Campbell and his colleagues need further exploration. Nonetheless, the pattern of cerebral atrophy they observed is strongly consistent with the findings of Heath and the results of Fried and Kalant. These reports, together with the numerous psychiatric reports cited above, converge to a remarkable extent "in supporting a *prima facie* view that repeated cannabis use acts on the deeper parts of the brain (where sensory information is processed and mood is controlled); that this is at first reversible, but becomes more persistent as cumulation occurs, and that later irreversible changes occur with loss of brain substance, due either to interference with the capacity of brain cells to synthesize their requirements or to interference with cell division."[64]

5. The Lungs

Recent clinical evidence and findings from several research laboratories demonstrate that cannabis inhalation has severely damaging effects on human lung tissue. Testimony on this subject before the Senate Subcommittee on Internal Security was summarized in two major conclusions:

> 1)—Chronic cannabis smoking can produce sinusitis, pharyngitis, bronchitis, emphysema and other respiratory difficulties in a year or less, as opposed to ten or twenty years of cigarette smoking to produce similar complications.
> 2)—Cannabis smoke, or cannabis smoke mixed with [tobacco] cigarette smoke, is far more damaging to lung tissue than tobacco smoke alone.[48]

The damage is described as 'pre-cancerous.'

Much of the evidence in support of these contentions comes from the extensive observations of Dr. Forrest S. Tennant, Jr., who headed the U.S. Army's drug program in Europe from 1968 to 1972. Tennant conducted detailed studies on the relation between the high incidence of severe respiratory problems in American soldiers and the use of the potent hashish preparations available to these men.[77] Of particular note was the appearance of what Tennant termed 'hashish bronchitis'[76] and emphysema. As Paton testified in the Senate hearings, "Emphysema is normally a disease of much later life; but now the quite unexpected prospect of a new crop of respiratory cripples early in life is opening up."[64] Tennant observed, "Even though [a person] can get bronchitis and emphysema from cigarette smoking, one must usually smoke cigarettes for 10-20 years to get these complications. We became alarmed about this because we began seeing [these conditions] in 18, 19 and 20-year-old men."[77] The cellular lesions found in bronchial biopsies of these men were identified as *squamous metaplasia,* a condition well known to be "statistically and anatomically linked with carcinoma of the lung."[76]

The subjects in Tennant's study absorbed very heavy doses of hashish smoke, and the results are not directly applicable to moderate cannabis users. However, the alarming rapidity with which severe respiratory problems developed,

coupled with the cumulative nature of cannabis action, raises the very real prospect of a greatly increased incidence of lung cancer in moderate smokers who use cannabis over a longer period of time. Paton stated that:

> Cannabis has not been used extensively in a society with an expectation of life long enough to show a carcinogenic effect, until recent years. In effect, a new experiment in cancer epidemiology started 5 to 10 years ago. . . . I believe that medical epidemiological studies of the pulmonary pathology of cannabis are now urgent for getting an early warning of a carcinogenic situation.[64]

The caustic and irritating effects of cannabis smoke are well known to all users, and recent work has shown that "like tar from tobacco cigarettes, reefer tar is carcinogenic when painted onto mouse skin."[64]

Additional supporting evidence showing lung damage has come from the laboratory studies of Dr. Cecile Leuchtenberger of the Swiss Institute for Experimental Cancer Research, Lausanne.[42] Working with small portions of excised mouse lung tissue cultured in a suitable nutrient fluid, Leuchtenberger showed that daily exposure to standardized puffs of marihuana smoke over a period of five consecutive days significantly altered the morphological appearance of these cells, interfered with cell division, and affected both the content and synthesis of DNA, the all-important genetic material of the cell. The cellular changes noted were described as 'pre-cancerous'; tobacco smoke had a much smaller effect. Similar studies with portions of living human lung tissue gave comparable results.

Leuchtenberger has also undertaken a study of the effects of standardized doses of cannabis on respiratory processes in laboratory mice.[43] Preliminary results indicate an effect from low doses of cannabis smoke on terminal bronchioles in these animals. In summarizing her work Leuchtenberger states:

> The observations that marihuana cigarette smoke stimulates irregular growth in the respiratory system which resembles closely precancerous lesions would indicate that long-term inhalation of marihuana cigarette smoke may either directly evoke lung cancer

or may at least contribute to the development of lung cancer. . . . Consequently, further extensive research is urgently needed to explore chronic effects of marihuana smoke on cells and tissues.[43]

6. The Immune System

A great deal of recent medical research has centered on the effects of marihuana on the immune system, that is, the capacity of the body to resist infectious agents and other foreign elements such as tissue transplants and cancer cells. Although the results of this research are not yet conclusive, there is strong evidence to suggest that THC suppresses the immune system of rodents and other experimental animals, and several reports pointing to this possibility in man.

One of the first studies concerning the effects of marihuana on the immune system in man was conducted by Dr. Gabriel G. Nahas, Research Professor of Anesthesiology at the College of Physicians and Surgeons, Columbia University. Nahas and his associates tested certain aspects of the immune response of 51 marihuana smokers, 16 to 35 years of age, who had smoked an average of four marihuana cigarettes a week for at least one year.[58] Lymphocytes, a class of white blood cells found in the body and known to play a key role in the body's defense system, were removed from these subjects and stimulated to undergo cell division. (Lymphocytes are cells that ordinarily divide very rapidly when the body is attacked by a virus or foreign tissue.) The rate of division of these cells was measured and found to be 41% lower in the cannabis smokers than in a control group of cells from non-smokers. A comparable diminution of this response was noted in 60 cancer patients, 26 uremic patients, and in 24 kidney transplant patients who were receiving immunosuppressive drugs to prevent rejection of their transplanted organs.

In subsequent investigations Nahas demonstrated that normal lymphocytes from the blood of non-marihuana smokers, when cultured in nutrient fluid in the presence of THC, cannabadiol (CBD), or cannabinol (CBN), were seriously impaired in their capacity to undergo cellular division.[59,60,62] This important result provides a convincing demonstration of THC effects at the cellular level. Indeed, the finding that THC and various other cannabinoid substances strongly inhibit cellular processes was fully documented by no less than 12 medical research groups at an international conference on marihuana held in Helsinki in the summer of 1975.[61] These researchers reported that cannabis substances strongly interfere with the synthesis

of DNA, RNA and protein in a wide variety of cell types, including a selection of human cell lines; that cell division and the rate of tissue growth are impaired; and that cells treated with cannabinoids undergo abnormal division, producing aberrant nuclei with subnormal amounts of DNA. As stated by Dr. W.D.M. Paton, one of the organizers of the conference, there appear to be at least two target organs for cannabis, apart from the brain, in which the cellular effects are prominent, (1) the testis and (2) the immune system.

The effect of marihuana on the immune system has been described by a number of researchers: Cushman and co-workers reported impairment of T-lymphocytes in chronic marihuana smokers;[21] Petersen and Lemberger described impairment of lymphocyte activity in cannabis users and showed in addition that polymorphonuclear phagocytes, a type of white blood cell that engulfs foreign substances, were also seriously reduced in number; [66] Harris and colleague demonstrated that delta-9-THC delays the rejection of skin grafts in laboratory mice by as much as 42 percent;[45] Rosencrantz described strong immunosuppressive effects in rodents;[69] Stefanis and Issidorides gave evidence of white blood cell changes in chronic hashish smokers in Greece;[72] Chari-Bitron showed that THC leads to paralysis of alveolar macrophages, cells considered to be the first line of defense in the human lung.[9] Several other investigators have been unable to detect an effect of THC on the immune system of man,[70],[82] and further research work will be needed to resolve the disparity between these findings and those cited above.

The medical implications of this work are very serious indeed. There is growing evidence to suggest that lymphocytes play a significant role in the body's resistance to cancer. Recent research supports the idea that numerous cancer cells arise within the body every day, but the healthy human organism has the capacity to resist and destroy them. Indeed, according to a recent statistical study, kidney transplant patients given immunosuppressive drugs to prevent organ rejection develop cancer at rates 80 times that of the general population.[65] Any impairment of the system of defense mechanism and immune responses, therefore, carries with it the distinct risk of malignancy and other serious pathological conditions. Long-term epidemiological studies will be needed to identify the actual connection between marihuana use and disease.

7. Reproductive Processes

Much of the medical evidence dealing with the effects of cannabis on processes of reproduction in man is preliminary and the conclusions must be regarded as tentative. It was the unanimous opinion of those medical scientists who appeared before the Senate Subcommittee on Internal Security, however, that the provisional results should be publicized both to scientific and lay audiences, in order to assist in the formulation of future research programs and to alert the public to the very real possibilities of serious and lasting damage to the human reproductive system.

Dr. Robert C. Kolodny of the Reproductive Biology Research Foundation in St. Louis testified to the Senate Subcommittee that there is evidence based on both animal and human experimentation to indicate that cannabis may cause "disruption of sperm production, the possibility of birth defects, the possibility of impairment of hormone balance and the possibility of either inhibition of puberty or disruption of normal sexual differentiation during fetal development."[39]

Working with Drs. William H. Masters and Gelson Toro of the Reproductive Biology Research Foundation, Kolodny studied a group of 20 young men, 18 to 28 years of age, who had used cannabis for at least six months, for an average of 9.4 times per week.[39] None of these subjects had ever used LSD or other hallucinogenic drugs, had any history of hormone imbalance, or showed evidence of prior liver disease. Twenty similarly screened individuals served as controls. The important finding was that testosterone,* the principal male hormone, was reduced in amount by 44% in the cannabis users. Subjects who had smoked more than ten times per week had lower levels of testosterone than those using cannabis less than ten times per week.

Six out of 17 individuals tested showed highly reduced sperm counts; two were found to be clinically sterile.

Kolodny's findings have seemingly been contradicted by a later study conducted by Dr. Jack H. Mendelson and asso-

*Testosterone, a steroid hormone produced by the testes, plays an important role in primary sexual differentiation during embryonic development, in secondary sexual changes occurring during adolescence, and in the production of functional sperm by the adult male.

ciates at the Alcohol and Drug Abuse Research Center, Harvard Medical School-McLean Hospital. During 21 days of progressively increasing marihuana consumption under controlled hospital conditions, Mendelson's group found no decrease in testosterone level in any of their 27 young male subjects.[50] This result was cited by Brecher to bolster his case for the Consumer Reports article.[6] In point of fact, however, no conflict exists between Mendelson's results and those of Kolodny. Kolodny, in tests at the University of California at Los Angeles, confirms Mendelson's finding that there is no decrease in testosterone level during the first three weeks of marihuana use. He has, however, observed a marked decrease beginning around the fifth week.[40]

There are other ways in which marihuana is suspected of affecting the reproductive processes. Hall's experience of 20% incidence of sexual impotence among long-term ganja smokers in Jamaica has already been cited,[22] and similar reports are known from private physicians in Morocco and India, where cannabis is widely used.[64] Kolodny also has observed instances of impotence in several of his subjects. Discontinuing marihuana use led to normal sexual functioning in every case.[39]

Several very serious implications arise from these studies. First, from animal experiments it is known that several cannabis constituents pass across the placental barrier into the developing fetus. Normal sexual development in males takes place during the fourth month of embryonic life and is dependent upon adequate levels of testosterone. Interference with testosterone production at this critical time could seriously impair primary sexual differentiation in unborn male children.

Secondly, marihuana products could seriously damage normal processes of sexual maturation in teenage boys undergoing adolescence. The increasing use of cannabis in the lower high school grades and in the junior high school years renders this an alarming possibility.

Thirdly, the diminished testosterone content and the possible connection between sexual impotence and cannabis use jeopardizes the ability of an adult male cannabis user to conceive children and to experience normal sexual functioning.

Recent medical research has added yet another finding to the list of cannabis effects on the human male. Dr. John W. Harmon of New England Deaconess Hospital, Brookline,

Massachusetts and Dr. Menalaos A. Aliapoulios, Associate Professor of Surgery at Harvard Medical School, described the apparent connection between cannabis use and gynecomastia, a feminizing change in men in which there is considerable enlargement of the breasts.[23] These researchers now know of 16 patients with marihuana-related gynecomastia. Four have requested surgical removal of the breast tissue; three have reported a reduction in breast size and a decrease in touch sensitivity following abstinence from marihuana. Harmon and Aliapoulios have also shown comparable changes in the mammary tissue of laboratory mice after injection of delta-9-THC.

A recent study on spayed female rats injected with THC has shown that THC acts like the female sex hormone estrogen in a standard test for estrogen activity.[71] This finding gives considerable support to the idea that many of the effects of marihuana on human males—depressed testosterone levels, gynecomastia, reduced sperm counts—can be explained by the estrogen-like effects of THC, for it is well-known that estrogen produces these same physiological effects in male human beings.

Another area of investigation centers on the connection between cannabis use and birth defects. Paton testified to the Senate Subcommittee that "administration of cannabis during the vulnerable period of pregnancy has been found to cause fetal death and fetal abnormalities in three species of animals. The factor responsible has not been identified but does not appear to be THC, although new work is showing that THC does kill a majority of fetuses and in the remainder produces an increased incidence of stillbirths and stunting [of limbs]. The effect is dose-related."[64] The doses used in the animal experiments were very high, but Paton feels that the observations warrant further investigation, especially with reference to possible birth defects in man. In calling attention to the animal work, Paton noted that one of the commonly observed defects was the stunting of normal limb formation, a thalidomide-like effect. According to Paton, "A provisional hypothesis for teratogenicity* is that this action of cannabis reflects its fat

*Environmental influences (usually within the womb) which cause impairment of normal embryonic development are termed *teratogenic agents*. Congenital abnormalities of this kind are not inherited conditions but result from toxicity to various tissues at crucial stages of growth and development. The best known examples of teratogens are *Rubella* (German measles virus) and the chemical substance thalidomide.

solubility . . . and constitutes a sort of anesthesia of limb-buds developing in the fetus at critical periods—hence the reduction-deformity."[64]

In this regard, Dr. Morton A. Stenchever, Chairman of the Department of Obstetrics and Gynecology of the University of Utah Medical School, has called attention to the high incidence of abnormal births in the drug culture, and has raised the possibility that birth defects once attributed to LSD may, in fact, be related to the consumption of cannabis:

> In a recent article by Jacobsen and Berlin entitled "Possible Reproductive Detriment in LSD Users," it was pointed out that, in 140 women and their consorts who had admitted to the use of LSD prior to or during pregnancy, 148 pregnancies led to the birth of 83 children, 8 of whom had major congenital defects. Fifty-three therapeutic abortions produced 14 embryos, 4 of which had gross defects. In addition, there was a probable increase in the spontaneous abortion rate, and in the amount of infertility noted over what might have been expected by chance. These patients were using other drugs, and the most interesting observation was that 100% of them also used marihuana. While it is possible that LSD was indeed the teratogenic agent in this series and equally possible that problems occurred in these patients because of a combination of drug uses, marihuana must still be considered a candidate for the prime agent causing these reproductive problems. Since marihuana is widely used, particularly in the young individuals of our society, this possibility takes on a spectrum of overwhelming significance.[73]

Further clinical observations and experimental research will be necessary before definitive conclusions can be drawn.

8. The Genes and Chromosomes

One final area of study centers on the effect of marihuana derivatives on the human genetic material, the genes and chromosomes. Of particular importance is the finding that cannabis products are absorbed into the ovaries and testes. Repeated exposure probably leads to a gradual increase in the tissue levels of these substances, which may be in far higher concentration there than the relatively low levels found elsewhere in the body.

In a very important study, Dr. Morton A. Stenchever, working with a group of student volunteers, tested the chromosomes of 49 cannabis users versus a control group of 20 non-users.[73] A complete medical history was compiled for each subject and the marihuana users were divided into two groups, according to the extent of their cannabis experience. Light users, defined as individuals who smoked one cigarette or less per week, had used cannabis for an average of 2.9 years; heavy users had smoked two or more cigarettes per week for an average of 3.4 years.* White blood cells of individuals were removed and studied by direct microscopic observation.

The results of this study showed a very high rate of chromosome breakage in the users, an average of 3.4 breaks per 100 cells studied, versus an average of 1.2 breaks per 100 cells in the control group. Heavy users had 3.8 breaks per 100; light users had 3.2 breaks per 100. These differences were shown to have a high degree of statistical significance. In addition, many blood cells of abnormal appearance were observed in the cells drawn from the cannabis users.

Stenchever's results confirm the earlier findings of Dr. Douglas G. Gilmour of New York University Medical School, who found significant chromosome breaks in 11 individuals who had used cannabis more than twice a month for several years.[18] Other kinds of chromosomal damage have also been described. Recently, Dr. Akira Morishima of the College of Physicians and Surgeons, Columbia University, demonstrated that as many as 30% of the lymphocytes of moderate cannabis

*In describing this work, Stenchever has used his own definitions for light and heavy use. Most of his heavy users would be termed moderate according to the conventions established by the National Commission on Marihuana, and his light users would be termed intermittent.

smokers contained a highly reduced number of chromosomes, from 5 to 30, instead of the normal complement of 46.[54]

Lest one underestimate the magnitude of the chromosome breakage observed in the Stenchever study, it must be emphasized that 3.4 breaks per 100 cells represents considerable damage and corresponds to the amount of breakage induced by high doses of ionizing radiation (150 roentgens).[33] To express the results differently, over 60% of the students smoking cannabis showed chromosome damage significantly above the control value.

Chromosome damage of the kind reported by Stenchever poses several serious dangers to normal health. Chromosome breaks in somatic cells* of the user may underlie leukemia and other forms of malignancy, as well as additional pathological conditions. Secondly, chromosome damage to the gonadal tissue of the user may seriously affect the physical and mental development of children conceived from germ cells (sperm or egg)* carrying the defective chromosomes. It is not known at this time whether cannabis derivatives actually cause chromosome breakage in human gonadal tissue, but most physical and chemical agents affecting the genes and chromosomes of somatic cells also affect reproductive tissue.

Several investigators, including Stenchever,[74] have been unable to show chromosomal aberrations in test-tube cultures grown in the presence of THC, and one study on short-term use in human subjects has failed to disclose any evidence of chromosomal damage,[63] but recently Morishima has demonstrated that THC, CBN and other cannabinoids seriously alter the normal process of cell division in the test tube, and that the same marked reduction in chromosome number can be seen in these cultures as is noted in cells taken from cannabis smokers.[55,56]

Finally, there are several reports in the medical literature describing substantial effects of cannabis on reproductive cells in animals, and at least two studies showing damage to sperm formation in man. Dr. Cecile Leuchtenberger and her asso-

*_Somatic_ or _body_ cells (muscle, nerve, skin, lung, blood, etc.) play no role in determining the inherited characteristics of subsequent generations. Chromosome breakage in these cells affects only the individual in whom the damage has occurred. _Germ_ or _sex_ cells (sperm and egg), on the other hand, are responsible for determining the inherited traits. Chromosome damage or other forms of genetic mutation in these cells is directly inherited.

ciates reported that fresh smoke from marihuana cigarettes not only affected the DNA content of mouse lung tissue cultured in suitable nutrient fluid, but also reduced the DNA content of spermatids (immature sperm) in gonadal tissue explants of the mouse.[42,44] Almost 50 percent of the mouse spermatids showed reduced amounts of DNA following daily administration of two to six standardized puffs of marihuana smoke over the course of a few days. Similar exposures to tobacco smoke had no effect whatsoever on the mouse spermatids.

Leuchtenberger's work complements the findings of Dr. V.P. Dixit, who demonstrated that the administration of relatively low doses of cannabis extracts to young adult male mice produced a complete arrest of sperm formation and a regression of Leydig cells (gonadal cells responsible for the production of male hormone).[13] In these experiments cannabis extract produced degenerative changes both in spermatids and in mature sperm of the experimental mice.

Two studies presented at the Helsinki conference on marihuana in 1975 gave evidence for cannabis effects on spermatogenesis in man. Dr. Wylie C. Hembree and his colleagues observed that five human males showed a marked decrease in sperm count after several weeks of very heavy marihuana use in a rigorously controlled hospital setting;[28] Drs. C.N. Stefanis and M. Issidorides described morphological alterations in the sperm of chronic hashish users in Greece.[72] Although the exact nature of the cannabis effects on sperm formation and function in man is unclear at this time, there is sufficient evidence, both from animal and human studies, to warrant grave concern over possible genetic consequences. As Stenchever has written, "The magnitude of the problem could be overwhelming when one considers the number of young people using the drug. The priority assigned to such studies should be the highest possible."[73]

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9. Conclusion

While further research remains to be done, there is already a large body of hard evidence available for anyone who wishes to reach an informed opinion, or to counsel those who seek advice. When I have reviewed some of the material presented here with my own students, the reaction has been mixed. Many have been deeply impressed by the consistency of the findings and the seriousness of the observed effects. But others remain adamant in their rejection of all unfavorable testimony. Perhaps their attitude should come as no surprise, for proof of physical harm alone has never been an effective deterrent to self-indulgence.

There is, of course, another dimension altogether to the marihuana question. Inescapably, the time comes when each must ask himself: What kind of person do I want to be? What kind of society do I want to live in? To pursue the ethical and social implications of marihuana use would lead me far beyond the intended scope of this article. And yet it is on just such considerations that the decision ultimately rests. I wish therefore to leave one question with the reader: Can the use of marihuana, in *any* amount, ever be reconciled with the clarity of thought, the personal integrity and the strength of will that an individual must have who would play an active role in helping humanity find the way out of its presently severe and ever-worsening difficulties?

Electron Microscope Pictures of Spermatozoa

A. Spermatozoa from a control subject.
B. and C. Spermatozoa from chronic hashish users in Athens, Greece.

Spermatozoa from hashish users show a decreased amount of essential proteinaceous substances. (From the work of Stefanis and Issidorides, 1976.[72] See p. 54)

10. References

1. Axelrod, J. (1974). Testimony before the Senate Subcommittee on Internal Security, May, 1974, ref. 48, pp. 142-146.
2. Barnes, C. and Fried, P.A. (1974). Tolerance of Delta-9-THC in Adult Rats with Differential Delta-9-THC Exposure When Immature or During Early Adulthood. Psychopharmacologia *34:* 181-190.
3. Bejerot, N. (1974). Testimony before the Senate Subcommittee on Internal Security, May, 1974, ref. 48, pp. 170-177.
4. Braenden, O.J. (1972). Testimony before the Senate Subcommittee on Internal Security, Sept. 18, 1972.
5. Brecher, E.M. and Editors of Consumer Reports. (1972). *Licit and Illicit Drugs,* Consumers Union Report, Little, Brown and Co., Boston and Toronto.
6. Brecher, E.M. and Editors of Consumer Reports. (1975). *Marijuana: the Health Questions.* Consumer Reports *40:* 143-149.
7. Brill, H. (1974). Testimony before the Senate Subcommittee on Internal Security, May, 1974, ref. 48, pp. 30-36.
8. Campbell, A.M.G., Evans, M., Thompson, J.L.G. and Williams, M.J. (1971). Cerebral Atrophy in Young Cannabis Smokers. Lancet *7736:* 1219-1224.
9. Chari-Bitron, A. (1976). Effect of Delta-9-Tetrahydrocannabinol on Red Blood Cell Membranes and on Alveolar Macrophages, ref. 61, pp. 273-282.
10. Clark, L.D. and Nakashima, E.N. (1968). Experimental Studies of Marihuana. Am. J. Psychiat. *125:* 135-140.
11. Cowan, K. (1974). Testimony before the Senate Subcommittee on Internal Security, May, 1974, ref. 48, pp. 250-264.
12. Crancer, A., Jr., Dille, J.M., Delay, J.M., Wallace, J.E. and Haykin, M.D. (1969). Comparison of the Effects of Marihuana and Alcohol on Simulated Driving Performance. Science *164:* 851-854.
13. Dixit, V.P., Sharma, V.N. and Lohiya, N.K. (1974). The Effect of Chronically Administered Cannabis Extract on the Testicular Function of Mice. Europ. J. Pharmacol. *26:* 111-114.
14. DuPont, R.L. (1975). Testimony before the Senate Subcommittee on Internal Security, May, 1975, ref. 49, pp. 461-471.
15. Fehr, K.A., Kalant, H., LeBlanc, A.E. and Knox, G.V. (1976). Permanent Learning Impairment After Chronic Heavy Exposure to Cannabis or Ethanol in the Rat, ref. 61, pp. 495-505.
16. Forney, R.B. (1971). Toxicology of Marihuana. Pharmacol. Rev. *23:* 279-284.
17. Fried, P.A. (1976). Short and Long-Term Effects of Pre-natal Cannabis Inhalation Upon Rat Offspring. Psychopharmacologia. In the press.

18. Gilmour, D.G., Bloom, A.D., Lele, K.P., Robbins, E.S. and Maximilian, C. (1971). Chromosome Aberrations in Users of Psychoactive Drugs. Arch. Gen. Psychiatry *24:* 268-272.

19. Grinspoon, L. (1969). Marihuana. Sci Am. *221:* 17-25.

20. Grinspoon, L. (1971). *Marihuana Reconsidered.* Harvard University Press, Cambridge.

21. Gupta, S., Grieco, M.D. and Cushman, P. (1974). Impairment of Rosette-Forming T-Lymphocytes in Chronic Marihuana Smokers. New England Journal of Medicine *291:* 874-876.

22. Hall, J.A.S. (1974). Testimony before the Senate Subcommittee on Internal Security, May, 1974, ref. 48, pp. 147-154.

23. Harmon, J.W. and Aliapoulios, M.A. (1974). Cited in: Pot Smoking and the Manly Bosom. Medical World News, Dec. 6, 1974.

24. Heath, R.G. (1973). Marijuana: Effects on Deep and Surface Electroencephalograms of Rhesus Monkeys. Neuropharm. *12:* 1-14.

25. Heath, R.G. (1974). Testimony before the Senate Subcommittee on Internal Security, May, 1974, ref. 48, pp. 50-70.

26. Heath, R.G. (1974). Paper submitted to the Senate Subcommittee on Internal Security, July, 1974, ref. 48, pp. 382-383.

27. Heath, R.G. (1976). Manuscript submitted for publication.

28. Hembree, W.C. III, Zeidenberg, P. and Nahas, G.G. (1976). Marihuana's Effects on Human Gonadal Function, ref. 61, pp. 521-532.

29. Hollister, L.E., Richards, R.K. and Gillespie, H.K. (1968). Comparison of Tetrahydrocannabinol and Synhexyl in Man. Clin. Pharmacol. Ther. *9:* 783-791.

30. Hollister, L.E. (1971). Marihuana in Man: Three Years Later. Science *172:* 21-24.

31. Isbell, H., Gorodetsky, G.W., Jasinski, D., Claussen, U., Spulak, F. and Korte, F. (1967). Effects of (-) Delta-9-Tetrahydrocannabinol in Man. Psychopharmacologia *14:* 115-123.

32. Jenson, J.N. (1975). Testimony before the Senate Subcommittee on Internal Security, May, 1975, ref. 49, pp. 431-450.

33. Jones, H.B. (1974). Testimony before the Senate Subcommittee on Internal Security, May, 1974, ref. 48, pp. 206-250.

34. Jones, H.B. (1976). What the Practicing Physician Should Know About Marijuana. Private Practice, January, 1976, pp. 34-40.

35. Jones, H.B. and Jones, H.C. (1977). *Sensual Drugs: Deprivation and Rehabilitation of the Mind.* Cambridge University Press, New York, Cambridge and Sydney. In the press. Available January 1, 1977.

36. Klonoff, H. (1974). Marijuana and Driving in Real-Life Situations. Science *186:* 317-324.

37. Kolansky, H. and Moore, W.T. (1971). Effects of Marihuana on Adolescents and Young Adults. J. Amer. Med. Assoc. *216:* 486-492.

38. Kolansky, H. and Moore, W.T. (1972). Toxic Effects of Chronic Marihuana Use. J. Amer. Med. Assoc. *222:* 35-41.

39. Kolodny, R.C. (1974). Testimony before the Senate Subcommittee on Internal Security, May, 1974, ref. 48, pp. 117-126.

40. Kolodny, R.C. (1975). Personal communication.

41. Kreuz, D.S. and Axelrod, J. (1973). Delta-9-Tetrahydrocannabinol: Localization in Body Fat. Science *179:* 391-393.

42. Leuchtenberger, C., Leuchtenberger, R. and Schneider, A. (1973). Effects of Marihuana and Tobacco Smoke on Human Lung Physiology. Nature *241:* 137-139.

43. Leuchtenberger, C. (1974). Testimony before the Senate Subcommittee on Internal Security, May, 1974, ref. 48, pp. 126-142.

44. Leuchtenberger, C., Leuchtenberger, R., Zbinden, J. and Schleh, E. (1976). Cytological and Cytochemical Effects of Whole Smoke and of the Gas Vapor Phase from Marihuana Cigarettes on Growth and DNA Metabolism of Cultured Mammalian Cells, ref. 61, pp. 243-256.

45. Levy, J.A., Munson, A.E., Harris, L.S. and Dewey, W.L. (1974). Effects of $\triangle 8$ and $\triangle 9$ Tetrahydrocannabinol on the Immune Response in Mice. Pharmacologist *16:* 259.

46. McIssac, W.M., Fritchie, G.W., Idänpään-Heikkilä, J.E., Ho, B.T. and Englert, L.F. (1971). Distribution of Marihuana in Monkey Brain and Concomitant Behavioral Effects. Nature *230:* 593-594.

47. Manno, J.E. et al. (1976). In: Miller, L.L., ed. *Marijuana: Effects on Human Behavior.* Academic Press, New York, p. 45.

48. *Marihuana-Hashish Epidemic and its Impact on United States Security.* Hearings before the subcommittee to investigate the administration of the Internal Security Act and other internal security laws of the Committee on the Judiciary, United States Senate. (1974). United States Government Printing Office, Washington, D.C.

49. *Marihuana-Hashish Epidemic and its Impact on United States Security: The Continuing Escalation.* Hearings before the subcommittee to investigate the administration of the Internal Security Act and other internal security laws of the Committee on the Judiciary, United States Senate. (1975). United States Government Printing Office, Washington, D.C.

50. Mendelson, J.H., Kuehnle, J., Ellingboe, J. and Babor, T.F. (1974). Plasma Testosterone Levels Before, During and After Chronic Marihuana Smoking. New England Journal of Medicine *291:* 1051-1055.

51. Mendelson, J.H. and Meyer, R.E. (1972). Cited in Maugh, T.H. II. (1974). Marihuana (II): Does it Damage the Brain? Science *185:* 775-776.

52. Moore, W.T. (1974). Testimony before the Senate Subcommittee on Internal Security, May, 1974, ref. 48, pp. 154-169.

53. Moreau, Jacques (1845). *Du Hachisch et de L'Alienation Mentale: Etudes Psychologiques.* Libraire de Fortin, Masson, Paris [English edition, Raven Press, New York, 1972].

54. Morishima, A. (1974). Testimony before the Senate Subcommittee on Internal Security, May, 1974, ref. 48, pp. 109-117.

55. Morishima, A., Milstein, M., Henrich, R.T. and Nahas, G.G. (1975). Effects of Marihuana Smoking, Cannabinoids and Olivetol on Replication of Human Lymphocytes: Formation of Micronuclei. In: *Pharmacology of Marihuana* (M.C. Braude and S. Szara, eds.). Raven Press, New York.

56. Morishima, A., Henrich, R.T., Jou, S. and Nahas, G.G. (1976). Errors of Chromosome Segregation Induced by Olivetol, a Compound with the Structure of C-Ring Common to Cannabinoids: Formation of Bridges and Multipolar Divisions, ref. 61, pp. 265-271.

57. Nahas, G.G. (1973). *Marihuana—Deceptive Weed.* Raven Press, New York.

58. Nahas, G.G., Suciou-Foca, N., Armand, J.P. and Morishima, A. (1974). Inhibition of Cellular Mediated Immunity in Marihuana Smokers. Science *183:* 419-420.

59. Nahas, G.G. (1974). Testimony before the Senate Subcommittee on Internal Security, May, 1974, ref. 48, pp. 92-108.

60. Nahas, G.G. (1976). Keep Off the Grass. Readers Digest Press, New York.

61. Nahas, G.G., Paton, W.D.M. and Idänpään-Heikkilä, J.E. (eds). (1976). *Marihuana: Chemistry, Biochemistry and Cellular Effects.* Springer-Verlag, New York and Heidelberg.

62. Nahas, G.G., DeSoize, B., Hsu, J. and Morishima, A. (1976). Inhibitory Effects of Delta-9-Tetrahydrocannabinol on Nucleic Acid Synthesis and Proteins in Cultured Lymphocytes, ref. 61, pp. 299-312.

63. Nichols, W.W., Miller, R.C., Heneen, W., Bradt, C., Hollister, L. and Konfer, S. (1974). Cytogenetic Studies on Human Subjects Receiving Marihuana and Delta-9-Tetrahydrocannabinol. Mutation Res. *26:* 413-417.

64. Paton, W.D.M. (1974). Testimony before the Senate Subcommittee on Internal Security, May, 1974, ref. 48, pp. 70-79.

65. Penn, I. and Starzl, T.E. (1972). Malignant Tumors Arising *de novo* in Immunosuppressed Organ Transplant Recipients. Transplant. *14:* 407-417.

66. Petersen, B.H., Graham, J., Lemberger, L. and Dalton, B. (1974). Studies of the Immune Response in Chronic Marihuana Smokers. Pharmacologist *16:* 259.

67. Powelson, D.H. (1974). Testimony before the Senate Subcommittee on Internal Security, May, 1974, ref. 48, pp. 18-29.

68. Powelson, D.H. (1974). Marijuana: More Dangerous Than You Know. Readers Digest (Dec. 1974), pp. 95-99.

69. Rosencrantz, H. (1976). The Immune Response and Marihuana, ref. 61, pp. 441-456.

70. Silverstein, M.J. and Lessin, P.J. (1974). Normal Skin Test Responses in Chronic Marijuana Users. Science *186:* 740-741.

71. Solomon, J., Cocchia, M., Gray, R., Shattuck, D. and Vossner, A. (1976). Uerotrophic Effect of Delta-9-Tetrahydrocannabinol in Ovariectomized Rats. Science *192:* 559-561.

72. Stefanis, C.N. and Issidorides, M.R. (1976). Cellular Effects of Chronic Cannabis Use in Man, ref. 61, pp. 533-550.

73. Stenchever, M.A., Kunysz, T.J. and Allen, M.A. (1974). Chromosome Breakage in Users of Marihuana. Am. J. Obstet. Gynecol. *118:* 106-113.

74. Stenchever, M.A. and Allen, M.A. (1972). The Effect of Delta-9-Tetrahydrocannabinol on the Chromosomes of Human Lymphocytes *in Vitro.* Am. J. Obstet. Gynecol. *114:* 819-821.

75. Tartaglino, A.C. (1974). Testimony before the Senate Subcommittee on Internal Security, May, 1974, ref. 48, pp. 2-18.

76. Tennant, F.S., Jr., Preble, M., Prendergast, T.J. and Ventry, P. (1971). Medical Manifestations Associated with Hashish. J. Amer. Med. Assoc. *216:* 1965-1969.

77. Tennant, F.S., Jr. (1974). Testimony before the Senate Subcommittee on Internal Security, May, 1974, ref. 48, pp. 288-314.

78. Waller, C.W. (1975). Testimony before the Senate Subcommittee on Internal Security, May, 1975, ref. 49, pp. 456-460.

79. Weil, A.T. (1972). *The Natural Mind.* Houghton Mifflin Co., Boston.

80. Weil, A.T., Zinberg, N.E. and Nelson, J.M. (1968). Clinical and Psychological Effects of Marihuana in Man. Science *162:* 1234-1242.

81. West, L.J. (1970). On the Marihuana Problem. In: *Psychotomimetic Drugs,* D. Efron (ed.). Raven Press, New York.

82. White, S.C., Brin, S.C. and B.W. Janicki. (1975). Mitogen-induced Blastogenic Responses of Lymphocytes from Marihuana Smokers. Science *188:* 71-72.

83. Winkler, F.E. (1970). About Marijuana. Myrin Institute, Inc. for Adult Education, New York.

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The CHAIRMAN. Anything further?
[No response.]
The CHAIRMAN. The hearing now stands adjourned.
[Whereupon, at 11:30 a.m., the hearing was adjourned.]

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